Electrical World

Volume 140—July-December, 1953

McGRAW-HILL PUBLISHING COMPANY, INC. • 330 West 42nd Street, New York City

SUGGESTIONS FOR USE OF INDEX

Articles in this index are arranged alphabetically according to subjects. This is not an index of titles. Each article is indexed under the general subject which the article treats. For example, if the article deals with generator testing it will be indexed under tests, if it treats industrial wiring it will be indexed under *wiring*, etc.

Feature length article and major news items have been cross-referenced to facilitate location of articles without extended search.

The following material has not been indexed.

Personal items.
New equipment.
Book Reviews.
Rate Changes.
Minor Financial News.
Minor Manufacturing Market News.

Related articles have been grouped under such headings as:

Appliances—All articles dealing with ranges, water heaters, ironers, etc., are indexed under appliances, rather than under the type of appliance discussed.

Associations, Societies and Governments Agencies—Major News items and articles relating to this group are indexed under the individual organization name.

Court Decisions and Suits—Major items are indexed under the name of the company involved.

Public Utilities—Articles dealing with individual power companies, and with their related activities, are indexed alphabetically under the company name and *not*, as formerly under the heading Public Utilities.

Rural Electrification—All articles dealing with various phases of supplying service to rural areas are indexed under this subject head.

Statistics—All articles dealing with any type of statistics are indexed under Statistics, regardless of the general subject class that the article falls under.

Steam Stations and Developments, Hydro Plants and Developments — Articles about generating stations are listed under one or the other of these heads, according to the type of station.

Following the main index is an index of authors of signed articles. In this index the exact title is listed.

GENERAL ALPHABETICAL INDEX

A

Accidents—American Gas & Electric safety manual, A. M. Perry, Nov. 23..... 16
California shows rise in electrical work mishaps (N) Aug. 3..... 35

Acounting

Central Power & Light cuts billing costs $20,000 a year, N. A. Easter, Oct. 26 ..... *32
Eliminating duplicate sheets saves money, Aug. 10..... 128
FPC drafts accounting change (N) July 13 119
Public utilities and NRECA give views on accounting rule (N) Oct. 26 7
Summary of accelerated amortization dispositions for electric utility industry (table) Oct. 19—133; Oct. 26 44

Advertising

Are advertising costs too high (Ed) July 13 106
Atlantic City Electric's rural selling program (N) Nov. 9..... *40
Companies adopt fuller programs Dec. 28 87
How the utilities spent their advertising dollars in 1952 (table) July 13.. 116
Hydro plant development by private company in advertisement Nov. 2.. *98
Reddy Kilowatt awards to 4 utilities, Sept. 7 ..... *74
African aluminum project (N) July 27.... 164

Air conditioning

"Adsorption-type" dehumidifiers marketed, July 13..... 186
Chattanooga's TVA offices air conditioned and heated by electricity, Sept. 7 .....*134
Comments on room coolers, Bryan, Damon, Scott, Sept. 7..... *149
Humidity controlled in garment storage room, L. Albertson, Sept. 7....*131
Lighting and air conditioning design coordinated, E. R. Dodson, Nov. 2 .....*132
Room air conditioners soon will be used the year round (N) Oct. 19.... 222
Room cooler problems, J. W. Anderson, Sept. 21..... 227
Room coolers—National Electrical Code—author rights himself, F. G. Hammer, Nov. 16..... 194
Soaring sales predicted for air conditioners (N) Oct. 12..... 41
Superior Dairy improves production with air conditioning, Nov. 30..... 133
Today's problems of serving room coolers, F. G. Hammer, July 27.... *86
Air patrolling of lines proves economical and effective, E. A. Schultz, July 27 .....*112
Air pollution see Smoke abatement
Air raids—Office of Defense Mobilization plans for bomb attack on industry, Oct. 12 6
Alabama Power Co.—Apply operating practices for savings (R) Sept. 7... 106
Design economics in high voltage transmission lines, Murray & Ussery, Aug. 24 .....*113

Aluminum

Aluminum distribution—savings outweigh difficulties, J. H. Exum, Oct. 12 ..... *32
Government sets up unit to distribute aluminum (N) July 20..... 47
Levittown, Pa. has aluminum distribution and unit substations, C. E. Nelson, Oct. 5..... *84
American Gas & Electric—Operating charts simplify switch sequence data, Older & Michaels, Dec. 14....*150
Safety manual, A. M. Perry, Nov. 23.. 16
Will promote resistance heating also, E. A. Snyder, Dec. 28..... 100
American Gas & Electric Service Corp. Mobile unit cuts long outages, P. S. Pugh (table) Dec. 7..... *34
American Institute of Electrical Engineers. Atlantic City report, July 13.....*112
Meeting sees engineering unity moving slowly, Nov. 23..... *32
Pacific General meeting (N) Sept. 14.. *6
American Society of Mechanical Engineers—Aska engineers aid social progress (N), Dec. 21..... 38
Appalachian Electric Power Co.—Hoist supports aid turbine pit maintenance, W. H. Brodie, Oct. 5.....*122
Portable boom aids turbine maintenance, C. D. McCarthy, Aug. 24....*166
Safety cradles added to a pole trailer, J. M. Dalton, Dec. 28.....*108

Appliances

All-electric project, Northfield, N. J.—house heating load study, Taylor, Knox & Webb (charts) Nov. 2..... *80
All-electric recreation building builds employees morale, L. B. Reed, Sept. 21 .....*180
"Be modern!—live electrically!" (Ed) Nov. 30 70
Cleveland Electric Illuminating Co. appliance saturation study (table) Aug. 31 39
Clothes dryers—Wheeling Electric demonstration trailer, Nov. 16.....*164
Coffee urns, range and grill used in employee cafeteria, Aug. 10..... 150
Consumers Power Co.—kitchen demonstration "Easy Does It" van, (N), Dec. 21 ..... *24
Electric bedding—Chicago Electric Assn. campaign (N) Dec. 7..... 41
Food freezer promotional program links food suppliers and freezer dealers, Oct. 19..... 168
Garbage grinders easy on water, survey shows, Aug. 24..... 190
GE's all-electric house known as the Wonder Home (N) Sept. 14..... *38
Installation costs (Ed) Nov. 2..... 72
Kitchen range to follow the Great Auk? (Ed) July 27..... 78
Manufacturers centralize manufacturing facilities to cut costs (N) Nov. 23 44
Maximum cost after purchase of home appliances to be added to the price (tables) Nov. 2..... 96
Monthly and total yearly operating costs of equipment (table) Sept. 14 38
New Jersey Power & Light booklet explains costs (N) Nov. 23..... 31
New Orleans Public Service prods dealers for the maximum market, Sept. 7 136
Pacific Coast Electrical Assn. Hawaiian Conference stresses mutuality in electric industry, Dec. 7..... *6
Pestiferous appliance tax (Ed) Oct. 5 76
Range contest promoted by Sacramento Municipal Utility District, Aug. 17 ..... *40
Range on trailer shown to potential customers, Oct. 19.....*168
Range sales hot during "Summer Frolic" by Carolina Power & Light, Marguerite Surles, Nov. 30..... 128
Ranges—Commonwealth Edison sells electric ranges with TV show (N) Oct. 12 ..... *39
Ranges—government tests show electricity more efficient than LP gas in home ranges (N) Dec. 7..... 40
Ranges often have remote fuses, Aug. 24 193
Room coolers—today's problems of serving, F. G. Hamner, July 27.... *80

(Ed) Editorial. * Illustrated. (N) News. (R) Reference Sheet.

Sacramento electrical home show increases sales, Aug. 24 ... *190
Sales vs inadequate wiring (chart) F. R. Innes, Nov. 9 ... 39
San Diego joins with manufacturers and builder in light conditioned, adequately-wired home. A. J. McCutcheon, Aug. 31 ... *38
Selling appliances on the point system, Aug. 10 ... *156
Tax put on appliances by Pennsylvania, July 27 ... 136
Television—color publicity lowers sales of black and white sets (N) Dec. 7 ... *43
Trailer sells commercial cooking, Oct. 5 ... *136
Washday habits have changed, Boston Edison survey (table) Nov. 2 ... 134
Washington Water Power launches first sales drive in a decade, Nov. 16 ... *162
Water heater service (Ed) Dec. 14 ... 114
Yearend round-up and forecast, Dec. 28 ... 79
Arizona Public Service Co.—Enlists children in safety drive, Nov. 2 ... 98
Loaded reels lifted safely and easily. William Norred, Nov. 30 ... *108
Low-cost clamp speeds mid-span taps on secondary cable, July 27 ... *120
Plant in Salt River Valley (N) Nov. 23 ... 24
Portable unit photographs and fingerprints new employees (N) Oct. 12 .. *38
Supervisors train themselves. Keith Turley, July 20 ... *22
Wrong lubricant causes failure of exciter coupling, Nov. 16 ... 154
Arkansas Power & Light—Reader's Digest story publicizes "Arkansas Plan", Nov. 30 ... 96
Arkansas' top business leaders discuss the state's development (N) Oct. 5 ... *101
Association of Edison Illuminating Companies Meeting sees utilities assuming civic duties (N) Oct. 26 ... *9
Atlantic City Electric Co. forms safe driving club (N) Oct. 19 ... 228
Interconnection helps utility delay new plant. W. F. Caven (charts) Dec. 14 ... *138
Jig facilitates servicing automatic line reclosers. A. A. Davis, Nov. 2 .. *118
Local study of house heating is essential. Taylor, Knox & Webb (charts) Nov. 2 ... *80
Safety flag warns truck driver of ladder position. H. C. Gant, Nov. 30 .. *108

Atomic Energy

Atomic Committee hears EEI, APPA, NRECA aides (N) July 27 ... 85
AEC launches nuclear power program —Westinghouse to build first atomic reactor power plant, Nov. 2 ... *74
Atomic study teams realigned (N) Sept 7 ... 71
British first: an atomic pilot plant (N) Nov. 30 ... *73
First private nuclear reactor at North Carolina State College (N) Dec. 7 .. *24
For the world and U. S. industry. (Ed) Dec. 28 ... 62
France launches plan for atomic development, July 6 ... *16
Industrial reactor program (list of firms) Aug. 31 ... 24
Joint Congressional Committee told that atomic reactors will produce economic power in a few years (N) July 6 ... 8
Let history repeat itself (Ed) Dec. 14 114
Make reactors competitive urges Wisconsin Utilities Assn. (N) Nov. 23 .. *15
Nuclear Power Co. formed to produce electricity from atomic power (N) Dec. 14 ... 118
Nuclear power: who'll develop it? Dec. 28 ... 89
Opportunity in nuclear power (Ed) Nov. 2 ... 72
PIP 4th conference discusses nuclear power, Nov. 16 ... *130
Private "eye-sotopes" in industry (N) Aug. 3 ... *35
Private nuclear power development theme of Atomic Energy in Industry conference, Nov. 9 ... *6
Swedish authority says power from atom far off (N) July 13 ... 241
Tables simplify comparison of nuclear power feasibility studies. J. W. Landis, Nov. 9 ... 24

Atomic Energy Commission

Argonne National Laboratory—steam from an atom breeder (N) July 13 .. *111
Asks industry aid in the construction of nuclear power plant (N) Dec. 14 118
Congress lifts power contract liability (N) July 20 ... 8
Funds secured from Congress for ship-power plant reactor (N) July 20 ... 7
General Electric proposes reactor plant (N) Oct. 26 ... 8
Hanford Works case to go to Supreme Court (N) Nov. 16 ... 109
Industrial reactor program (list of firms) Aug. 31 ... 24
Maj. Gen. K. D. Nichols new AEC manager (N) Oct. 12 ... *8
Nuclear power program in launched Nov. 2 ... *74
Official tells NARUC a non-utility operation may be needed to develop commercial power from the atom (N) Oct. 5 ... 105
Source of power for H-bomb plant (N) Aug. 24 ... *107
Strauss named head (N) July 6 ... *18
TVA claims better A-plant record (N) Sept. 7 ... *70
TVA to conduct studies in nuclear power field (N) Dec. 28 ... 68
Atomic Energy in Industry—annual conference theme is private nuclear power development, Nov. 9 ... *6
Atomic Industrial Forum, Inc. key officers named (N) Sept. 28 ... *34
Austria constructing 220-kv line to serve Italy (N) Aug. 31 ... 24
Automobile drivers—teaching utility drivers to be safe. E. F. Hockenbeamer, July 20 ... *16

Awards

Electrical Construction and Maintenance magazine lighting contest winners announced (N) Sept. 14 ... *8
Foreign Traders Award goes to Philadelphia Electric (N) Oct. 5 ... *102
James H. McGraw awards to H. A. Winne and B. W. Clark (N) Nov. 16 ... *108
Merit recognitions—"Oh, well! nothing to boast of" (Ed) Oct. 19 ... 103
New Orleans Public Service planning entry for EEI lighting award. E. R. Tschirn, Nov. 23 ... *29
1953 Edison Medal awarded to John F. Peters (N) Dec. 28 ... *66
Reddy Kilowatt awards to 4 utilities, Sept. 7 ... *74

B

Batteries—Fluorine-treated water is not harmful to storage batteries, July 13 ... 156
Battery charging with electronic mercury tube rectifiers. L. J. Langevin, Sept. 7 ... 132
Boston Edison—reconnected transformers reverse power. Benjamin Albert (charts), Dec. 28 ... 105
Washday habits have changed (table) Nov. 2 ... 134
British Electrical Power Convention (N) July 6 ... 15
British Productivity Council—sets up fuel advisory service (N) Dec. 7 ... 24
Busbars and buses—Basic principles to support aluminum and copper buses. Morris Brenner (R) July 27 ... *118
Test-lead clamp on pole for testing bus connections Oct. 5 ... *112
Bushings—jet cooling quadruples generator bushing capacity, July 27 ... *112
Business trend is down (table) Sept. 21 .. 132

C

Cables

Aerial cable storm-proofs 4-kv distribution system. Fred Sciotti, Oct. 19 ... *114
Aerial cable—too much spaghetti? F. W. Chapman, Nov. 16 ... *194
Cable pulling eye saves money. H. Sorenson, Aug. 10 ... *138
Consolidated Edison pulls pipe cable under water in unspliced lengths exceeding 6,800 ft. Fisher & Gillette, Oct. 5 ... *98
11-mile pipe loop completes 132-kv loop in New Jersey. Carmichael & Starrs, Sept. 7 ... *76
English channel cable tests to start (N) July 20 ... 18
English Channel test cable is laid, Aug. 17 ... *6
Gas leaks detected by pressure indicator. W. J. Montgomery, Oct. 5 .. *112
Geiger counter locates hidden pull box. F. H. MacGinnis, July 13 ... *169
How to duct-splice insulated lead-covered cable. J. B. Bowen (chart) Nov. 16 ... *124
Insulated multiple terminals solve space problem in vault. Morris Brenner, Aug. 24 ... *180
Low-cost clamp speeds mid-span taps on secondary cable, July 27 ... *120
New Moraga-San Mateo cable strung between towers across San Francisco bay (N) Aug. 3 ... *16
Potomac Electric Power lays 5 cables across the Potomac in 2 hr. 40 min. Moran & Dannettell, Nov. 30 ... *89
Pressure cable to be laid in Potomac River (N) Aug. 17 ... *43
Sags for No. 6, 3 and 1-0 aerial cable, 5 kv. Fred Sciotti, (R), Dec. 28 112
Simple jacks lift 15,000-lb reels. G. J. Newman, Dec. 28 ... *123
Sweden completes world's longest underwater transmission line (N) Nov. 23 ... 24
California Oregon Power—fault locator finds one breakdown, pays for itself. W. H. Fisher, Nov. 30 ... *101
Cambridge Electric Light Co. presents skit on utility expenses (N) July 6 .... *44

Capacitors

Added capacity of distribution system allows dust collector system, Oct. 5 ... 140
Capacitor frontiers still expanding Rydbeck & Hendrickson (charts) Sept. 7 ... *86
Raising power factor by addition of capacitors at clock company, July 13 ... 176
Carolina Power & Light Co.—line jeep power winch handles 80-ft poles. Vivian Bushong, Sept. 7 ... *118
Progressive oil purification saves clay and cuts costs. A. M. McCabe, Aug. 24 ... *158
Reflector lights aid truck safety. Vivian Bushong, July 27 ... *124
"Summer Frolic" range campaign aids sales. Marguerite Surles, Nov. 30 ... 128
Central Hudson Gas & Electric—training course, Nov. 23 ... *43
Central Louisiana Electric places in operation Teche Station (N) Sept. 14 .. 24
Teche Power station dedicated (N) Nov. 9 ... 8
Central Power & Light—billing costs cut $20,000 a year. N. A. Easter, Oct. 26 ... *32
Dollies make meter box handling easier, July 13 ... *152
Chattanooga Electric Power Board—Lighting and air conditioning design coordinated. E. R. Dodson, Nov. 2 ... *132
Cincinnati Gas & Electric—electronic battery charging saves floor space. L. J. Langevin, Sept. 7 ... 132
Indicator detects gas-filled cable leaks. W. J. Montgomery, Oct. 5 ... *115
Portable set tests overcurrent relays. E. J. Emmerling, July 27 ... *100
Rug cleaning machine increases production over 200%. C. T. Ballard, Aug. 10 ... *148
Selective fusing saves breaker replacement. L. J. Langevin, Aug. 24 180
Wiring campaign (N) Nov. 9 ... *18

Circuit Breakers

Electrical breaker racker saves time. Brown & Trippy, July 27 ... *120
Jig facilitates servicing automatic line reclosers. A. A. Davis, Nov. 2 .. *118
Oscillograph tests high-speed air-blast breakers. Frank Kunze, Nov. 2 .... *107
Portable instrument checks breaker performance. Frank Kunze, Sept. 21 ... *168
Cleveland's Dept. of Public Utilities—holds open house (N) Nov. 23 ... *7
Cleveland Electric Illuminating Co.—Appliance saturation study (table) Aug. 31 ... 39
Engine-motor-flywheel power unit for microwave systems. B. W. David (charts) Oct. 19 ... *128
New Eastlake plant goes on the line (N) Sept 21 ... *123
Panel heating experiences (tables) Nov. 2 ... *84
Teamwork with builder spurs residential sales, Aug. 24 ... *188
Columbus Southern Ohio Electric—conveyor delivers coal from mine to plant, Nov. 30 ... *116
Commonwealth Edison—aluminum blyptal seals welds. A. F. Pfandenhauer, July 13 ... *148
Copper contacts can be operated above standard temperature limits. Adler & Wadleigh, July 27 ... *96
Electronic applications bring new plant maintenance problems. H. L. Garton, Oct. 19 ... *111
Federal Housing Authority formula proves better for electric heating calculations (charts & tables) Nov. 2 ... *91
Fisk Station commemorates giant generator of 1903 (N) Oct. 12 ..... *7
Radar test set developed for fault location. Whysong, Garton & Bracken, Nov. 16 ... *118
Communist cell reported to be operating in San Francisco area public utilities (N) Aug. 24 ... 104

Conductors

Armor rods speed splicing on aluminum conductors at Detroit Edison, Nov. 16 ... *159
For that extra line capacity should it be reconductoring or bundling? P. S. Colby (tables) July 27 ... 101
115-kv conductor repaired in 14 min. W. L. Rush, Dec. 14 ... *156
Connecticut Light & Power rates raised, Nov. 2 ... 101

Connectors

Aluminum distribution—savings outweigh difficulties. J. H. Exum, Oct. 12 ... *32
Compression solves distribution connections. Matthysse & Dupre, Sept. 21 ... *159
Copper contacts can be operated above standard temperature limits. Adler & Wadleigh, July 27 ... *96

(Ed) Editorial. * Illustrated. (N) News. (R) Reference Sheet.

Uniformity on connectors. E. W. Greenfield, Nov. 2 ... 156
Wrapped wire solderless connections cut installations costs, July 13 ... *141
Consolidated Edison—adequate wiring program, Nov. 30 ... *76
Astoria plant (N) Nov. 9 ... *7
Astoria plant insulation problems solved with silicone. J. G. Noest, Nov. 16 ... *112
Astoria station features. Knecht & Noest, July 27 ... *92
Engine generators for emergency service (R) Aug. 10 ... 132
Lead clamp on pole saves 95% test time, Oct. 5 ... *112
Pipe cable can be pulled farther. Fisher & Gillette, Oct. 5 ... *98
To tear down Cable Yard (N) Sept. 14 ... *15

Construction

Long Island Lighting's headquarters built to expand with operating needs. A. J. Pansini, Dec. 14 ... *134
Underground control room for Long Island Lighting system. Davidson & Gummersall, Nov. 30 ... *78
United Nations reports on power construction in Europe (tables) July 27 ... 106
Consumers Power Co.—Cobb plant addition (N) Nov. 9 ... 8
"Easy Does It" kitchen demonstration van, (N). Dec. 21 ... *24
Consumers Public Power District—meter cutoff simplifies chart removal schedule. F. C. Hush, Nov. 16 ... *144

Controls

Commonwealth Edison finds growing electronic applications bring new plant maintenance problems. H. L. Garton, Oct. 19 ... *111
Control system provides position indication and circuit supervision. I. D. Perry, Sept. 7 ... *108
Frequency-shift telemetering key to multistation dispatching, Southwestern Public Service. Dupree & Burnham, Oct. 5 ... *89
GE's all-electric house with remote control wiring known as the Wonder Home (N) Sept. 14 ... *38
Holtwood, Pa. control board (N) Oct. 5 ... *80
Long Island Lighting Co.'s new central operating headquarters (N) July 6 ... *34
Long Island Lighting's new underground control room. Davidson & Gummersall, Nov. 30 ... *78
Pennsylvania Electric consolidates communication in new dispatching center. C. H. Conrad, Dec. 28 ... *94
Single channel controls system load and frequency at General Electric. G. S. Lunge, Nov. 30 ... *86
Copper—strain history affects copper characteristics, Aug. 10 ... 127

D

Dallas Power & Light—Transformers kept in pace with loads, Nov. 18 ... *116
Dayton Power & Light Co.—Sprayed plastic masking facilitates panel painting. Glen Herbst, Nov. 2 ... *110
Defense—Office of Defense Mobilization plans for bomb attack on industry, Oct. 12 ... 6
Delaware Power & Light plans station on Indian River (N) Aug. 10 ... 92
Detroit Edison—armor rods speed splicing, Nov. 16 ... *159
Clearing house for wiring problems, Sept. 21 ... *190
Interchange with Ontario Hydro ready (N) Aug. 31 ... 9
Oscillograph tests high-speed air-blast breakers. Frank Kunze, Nov. 2 ... *107
Portable instrument checks breaker performance. Frank Kunze, Sept. 21 ... *168
Several firsts mark new St Clair plant. Wagner & Brown, Aug. 3 ... *32
Thyratron tube locator spots overhead grounds. F. M. Hartz, Sept. 7 ... *92
Dials—switching the dial. Bob Oetting, Nov. 16 ... 194
Diesel power plants—M & A Electric Power Co-op diesel plant efficient on oil or gas. Wilson & Potthoff, Oct. 5 ... *92

Distribution Systems

Aerial cable storm-proofs 4-kv distribution system. Fred Sciotti, Oct. 19 ... *114
Aluminum connectors—savings outweigh difficulties. J. H. Exum, Oct. 12 ... *32
Anacom from Westinghouse solves system transients. C. L. Wagner, Nov. 16 ... *127
Banked secondaries have advantages over radial secondary systems in residential areas. Ager & Ramandanes (charts) July 27 ... *90
Compression solves distribution connections. Matthysee & Dupre, Sept. 21 ... *159
Conductor tension and guying tables for distribution lines. H. C. Johansen (R) Nov. 30 ... 112
Container extends paint brush life. J. W. Mason, Sept. 7 ... *110
Detachable guide reduces rope wear, Nov. 2 ... *114
Distribution is different, (Ed), Dec. 28 ... 62
Distribution seeks reliability, Dec. 28. 76
Geiger counter locates hidden pull box. F. H. MacGinnis, July 13 ... *169
General Electric single channels controls system load and frequency. G. S. Lunge, Nov. 30 ... *86
Graph simplifies calculations for 5-kv circuit impedance. F. E. Reeves (chart) (R) Aug. 24 ... *164
Indiana & Michigan Electric educates public by using models to demonstrate high-line hazards. J. F. Phelan, Dec. 7 ... *32
Levittown, Pa. has aluminum distribution and unit substations. C. E. Nelson, Oct. 5 ... *84
Load centers and bus duct provide flexibility in motor plant. L. B. Reed, Oct. 19 ... *174
Long Island Lighting system centers its operations in new underground control room. Davidson & Gummersall, Nov. 30 ... *78
Low-cost clamp speeds mid-span taps on secondary cable, July 27 ... *120
Office building—selective fusing saves breaker replacement. L. J. Langevin, Aug. 24 ... 180
One digger, loads poles, digs holes, erects, July 27 ... *129
Organizing a voltage change over. A. R. Perdue, Sept. 7 ... *83
Oversized auger digs large hole quickly, Sept. 7 ... *110
Pennsylvania Electric consolidates communication in new dispatching center. C. H. Conrad, Dec. 28 ... *94
Power Distribution Conference meeting (N) Nov. 2 ... *77
Radar test set used for fault location in the field. Whysong, Garton & Bracken, Nov. 16 ... *118
Shop-fabricated transformer pole rack, July 27 ... *124
Single-phase load split on 3 phases by arc furnace. B. W. Schafer (charts & tables) Nov. 30 ... 92
13.2 Kv vs 4.12 Kv. W. R. Bullard, July 27 ... 148
Today's plan for economy in distribution. Campbell & Reilly (charts & tables) Oct. 19 ... *120
Trimming tool tapers fibre conduit, saves time. E. M. Kueht, Oct. 19 ... *162
Whither goest distribution? (Ed) Dec. 14 ... 113
Duke Power land program preserves water, forests and soil. Sept. 28 ... *22
Duquesne Light Co.—electric furnaces make better tools. R. L. Comboy, Aug. 24 ... *182
Elrama power station expansion requires company to change system. J. S. Brown, Dec. 14 ... *123
Fire hazard reduced with electric steam generator. R. I. Lavelle, Sept. 7 ... *132
Infrared baking aids mass production, Oct. 5 ... *140
Infrared paint drying saves floor space. E. M. Wenner, Aug. 10 ... *148
New design substation blends into landscape. E. M. Gue, Sept. 28 ... *32
Sidewalk electrically heated eliminates snow maintenance. R. L. Conboy, Oct. 19 ... *183
Strip heaters provide uniform temperature distribution. C. L. Stapel, Oct. 5 ... *138

E

Ebasco Client Companies—Meeting stresses attitudes towards safety (N) Nov. 9 ... *41
Edison Electric Institute—Accident Prevention Committee meets (N) Oct. 5 ... *82
Equipment Committee meeting discusses system fire protection (N) Nov. 16 ... 111
Forecasts 17.1% power reserve (N) (chart) Dec. 14 ... 120
Industrial Relations Committee conference planned (N) Aug. 17 ... 37
Plans made for labor conference (N) Sept. 28 ... *43
Pocketbook of industry statistics (Ed) Nov. 16 ... 104
Sales Conference awards get new inducements (N) Dec. 7 ... 41
Transmission and Distribution meeting says attitude plays key role in safety (N) Oct. 19 ... *106
Edison Electric Inst. and Assn. of Edison Illuminating Companies Meter and Service Committees discuss standardization (N) Nov. 2 ... *76
Edison National Park to be established (N) Nov. 23 ... 24
Electric Companies Public Information Program 4th Conference—Electrical World report, Nov. 16 ... *130
Electrical industry—Forecast for 1954-63. Fischer Black (chart) Sept. 21 ... 131
Electricity or electry? (Ed) Nov. 16 ... 104
Electronics—Commonwealth Edison finds growing electronic applications bring new plant maintenance problems. H. L. Garton, Oct. 19 ... *111
Sorting by electronics improves coffee quality. O. V. Baldwin, Nov. 30 ... *130

Employees

Active Communist cell reported to be operating in San Francisco area public utilities (N) Aug. 24 ... 104
All-electric recreation building builds employee morale. L. B. Reed, Sept. 21 ... *180
American Gas & Electric safety manual. A. M. Perry, Nov. 23 ... 16
Bechtel Corp. has new labor trouble at Joppa (N) Sept. 28 ... 43
California Electric Power rules union shop out (N) Oct. 12 ... 38
Central Hudson Gas & Electric training course, Nov. 23 ... *43
CIO-AFL heads sign a no-raiding pact, (N), Dec. 28 ... *65
CIO officers re-elected (N) Dec. 7 ... *39
Developing a good system dispatcher. Jess Paschall, Sept. 14 ... 39
Draft of White House message to Congress on Taft-Hartley law (N) Aug. 17 ... 29
Job enlargement beats assembly line, (Ed), Dec. 28 ... 62
Joppa, Ill. strike continues (N) Oct. 5 ... 79
Long Island Lighting offers "Engineering Technical Development Program" for employees (N) Dec. 7 ... 39
Montaup Electric—wholesale generation not "unique" (Ed) Sept. 21 ... 116
Pacific Gas & Electric boosts wages 3½% (N) Dec. 7 ... 39
Pacific Gas & Electric driver permit. E. F. Hockenbeamer, Nov. 2 ... *156
PIP 4th Conference discusses speakers bureau, Nov. 16 ... *130
Portable unit photographs and fingerprints new employees (N) Oct. 12 ... *38
San Diego Gas & Electric puts itself up for trial by ballot. Oct. 26 ... *16
Science Research Associates develop new test battery for job analyses (N) Dec. 7 ... 39
Seattle City employees ask wage hike (N) Aug. 17 ... 37
Teaching utility drivers to be safe. E. F. Hockenbeamer, July 20 ... *16
UN collects world data on power per worker (tables) Oct. 5 ... 104
UMWA looks to a merger (N) July 6 ... 43
Utah Power & Light employee information program, Dec. 7 ... *22
Wage boost in Northwest (N) Sept. 28 ... 43

Energy

Annual kwhr use in 21 cities 1941 and 1951 (table) Sept. 21 ... 125
EEI survey committee reports estimates of new capacity have been cut (N) Sept. 7 ... 71
Electricity consumption in European countries 1951 (table) Aug. 17 ... 29
Mid-Century Resources Conference Round-table discussion on energy (N) Dec. 14 ... *116
UN collects world data on power per worker (tables) Oct. 5 ... 104

Engineers

Drive to ease engineer shortage shows results (N) July 20 ... 39
Engineering unity moving slowly says AIEE, Nov. 23 ... *32
Engineers at Congress. C. T. Shock, July 27 ... 148
Enrollment of women urged (N) Dec. 7 ... 39
Radio recruiting, Oct. 12 ... *16
That cultural lag (Ed) Oct. 19 ... 104
Today's pay of a 5-year grad, Aug. 31 ... 43
Engines—motor-flywheel power unit for microwave systems. B. W. David (charts) Oct. 19 ... *128
Tips on starting gasoline standby engines. F. E. Rotenberry, Sept. 21 ... 174
Equipment — Foreign competition for power equipment (Ed) July 13 ... 105
Eugene Water & Electric Board—engages in direct competition with Mountain States Power (N) Aug. 3 ... *8
Sets lighting example. J. F. Whitney, Sept. 7 ... *90

F

Federal Power Commission

After 20 years a new federal power policy, Dec. 28 ... *80

(Ed) Editorial. * Illustrated. (N) News. (R) Reference Sheet.

Lee Digby fills last vacancy (N) Aug. 10 ... 93
Niagara Falls—New York seeks court endorsement of state control over water rights, Oct. 26 ... 6
Northern Natural Gas Co. vs FPC case decision—rate of return policy reversed. C. P. Guercken, Sept. 7 ... 97

Financial

Business inventories rise, Aug. 24 ... 110
Business trend is down (table) Sept. 21 ... 132
Capital expenditures to peak in 1954 (table) Sept. 21 ... 144
Changed value of dollar, Aug. 31 ... 44
Dispelling the fear of Wall Street (Ed) Dec. 14 ... 114
Federal Reserve Policy change boosts bond prices, Dec. 28 ... 88
Financing may set a record in 1953 (chart) Nov. 30 ... 99
Florida rate verdict may have wide effect. C. P. Guercken, Sept. 28 ... 44
Market outlook for electric utility common stocks. T. W. Locke (charts) Sept. 21 ... *150
New money bond sales set record, Aug. 10 ... *97
Summary of accelerated amortization dispositions for electric utility industry (table) Oct. 19 ... 133
Oct. 26 ... 44
Utility beat analyst. Harold Young, Sept. 28 ... *16
Utility earnings will be maintained in the next recession. C. P. Guercken (charts) Sept. 21 ... *145
Utility plant investment versus annual revenues (tables) Oct. 19 ... 132
Year-end balance sheet Class A & B electric companies (table) Aug. 10 ... 96
Finland—Power system (map) Nov. 9 ... *32
Fish—salmon in British Columbia to have underwater "traffic lights", Sept. 14 ... 24
U. S. agency allotted funds for fish study (N) Sept. 21 ... 123
Florida Power—wins franchise election (N) Dec. 7 ... 24
France—Can France stay ahead of the game in power? July 6 ... *16

Fuel

Heat and fuel requirements for thermal-electric generation in 1960 (charts) (R) July 13 ... *150
M & A Electric Power Co-op diesel plant efficient on oil or gas. Wilson & Potthoff, Oct. 5 ... *92
Scotland plans peat-burning power plant (N) Aug. 10 ... 205
Fuses—Over-size puller aids fuse replacement. I. E. Goodner, July 13 ... *156
Selective fusing saves breaker replacement. L. J. Langevin, Aug. 24 ... 180

G

Geiger counter locates hidden pull box. F. H. MacGinnis, July 13 ... *169
General Electric Co.—offers Science Fellowship Program, Aug. 31 ... *16
Single channel controls system load and frequency. G. S. Lunge, Nov. 30 ... *86

Generating Capacity

Illinois Power increases generating capacity fifteenfold since 1947 (chart & map) Aug. 3 ... *22
New electric generating facilities to be installed 1953-56 (table) Sept. 21 ... 128
Study heat cycle arrangement for low-cost generation. D. E. Hart. (charts & tables) Dec. 28 ... 96
Utilities across the nation install large generating units (N) Dec. 7 ... 18

Generators

Cooling arrangements to ensure generator operating reliability under ambient temperatures. J. H. Jupe, Sept. 21 ... *162
Engine generators for emergency service (R) Aug. 10 ... 132
Fire hazard reduced with electric steam generator. R. I. Lavelle, Sept. 7 ... *132
Jet cooling quadruples generator bushing capacity, July 27 ... *112
McNary Dam—stator readied for generator (N) Nov. 9 ... *43
Wrong lubricant causes failure of exciter coupling at Arizona Public Service, Nov. 16 ... *154
Georgia Power Co.—Clark Hill power sales contract okayed by the Dept. of Interior (N) July 13 ... 111
Gets rate hike, Nov. 16 ... 137
Making progress two ways: technically and socially. Oct. 12 ... *22
Measuring small voltage variations. R. W. Baker (charts) Nov. 30 ... 94
Old washing machine cleans meter covers better, Sept. 7 ... *108
Organizing a voltage change over. A. R. Perdue, Sept. 7 ... *83
Tells Dublin, Ga. it will not sell facilities (N) Aug. 17 ... 29
Germany—East and West Germany have resumed exchange of electric power (N) Sept. 21 ... 123
West German problem: transmission and taxes, Aug. 31 ... *22

Government Controls

After 20 years a new federal power policy, Dec. 28 ... *80
"Arkansas Plan" publicized by Reader's Digest story, Nov. 30 ... 96
"Come, let us reason together"—report to the PIP conference. C. A. Davis, Nov. 16 ... *134
"Creeping socialism" (Ed) July 27 ... 78
EEI president criticizes tax policies which favor public groups (N) Oct. 5 ... 78
Federal agencies streamlined (N) Sept. 14 ... 15
Federal power policy: how administration attitudes compare—Democratic and Republican, Aug. 31 ... 7
Hoover Commission to scrutinize federal power policy (N) Aug. 17 ... 9
Industrial Relations Committee warns of threat of government in business (N) Oct. 26 ... *34
The new power policy: a second look (Ed) Nov. 16 ... 103
No "real" change in power policy, Aug. 31 ... 6
No time for complacency (Ed) Sept. 21 ... 116
Private power question—was it worth it after all? R. J. Maloney, Nov. 2 ... 156
Republican Administration changes the course of federal power policy, Aug. 24 (Ed) ... 100 *102
Senator Morse to discuss Administration power policy (N) Sept. 21 ... 121
U. S. Dept. of Interior not in power business says McKay at PEA meeting (N) Oct. 5 ... *78

Great Britain

British first: an atomic pilot plant (N) Nov. 30 ... *73
Experiments with electric farm aids. J. H. M. Sykes, Aug. 3 ... *38
First section of new grid completed (N) Aug. 10 ... 203
First section of 275-kv supergrid. J. H. M. Sykes, Aug. 31 ... *32
Railways try out 50 cycles (N) Nov. 23 ... *8
Great Lakes Power Club meeting (N) Oct. 19 ... 228

Grounding

Factors determining the potential rise in station ground mats. M. J. Lantz (charts & tables) Dec. 14 ... *127
Overvoltage during line-to-ground fault. D. F. Inwood (charts) (R) Dec. 14 ... *152
Soil and galvanizing affect steel corrosion, Sept. 7 ... *104
Static removal by use of grounded tinsel at printing plant, July 27 ... 132
Thyratron tube locator spots overhead grounds. F. M. Hartz, Sept. 7 ... *92
Guatemala holds U. S. utility (N) Aug. 31 ... 43
Gulf States Utilities Co.—Shop fabricated rack saves time and money, July 27 ... *124
Trailer sells commercial cooking, Oct. 5 ... *136
Transformer thermometer attaches easily, Sept. 21 ... *179

H

Hartford Electric Light Co.—Emergency installation serves temporary need. E. D. P. Gross, Sept. 21 ... *194

Heat Pumps

Air-to-air heat pump passes Utah test (N) Dec. 7 ... *40
General Electric's heat pump now a "Weathertron", Aug. 24 ... 193
Motel plans largest heat pump installation (N) Oct. 12 ... 39

Heating—Electric

Air compressor cooling system kept ready with electric heater, Aug. 24 ... 184
All-electric home includes heating. (Ed). Dec. 28 ... 62
Blow hog converts waste wood into cattle bedding, Aug. 10 ... 152
Chattanooga's TVA offices air conditioned and heated by electricity, Sept. 7 ... *134
Clay hopper heated with flat strip heaters, Nov. 2 ... 140
Cracker shells walnuts with 65,000 v. Nov. 2 ... *138
Curing plastic coating on cloth by use of radiant heaters, Aug. 10 ... 152
Dielectric oven speeds core baking, Nov. 16 ... *168
Drying ink on printed vinyl plastic cards, Aug. 24 ... 184
Drying sand with electric strip heating, Sept. 21 ... 189
Electric furnaces make better tools. R. L. Conboy, Aug. 24 ... *182
Electric glass panels heat office building, Oct. 5 ... 142
Electric heat used first time in Birmingham apartment building (N) Aug. 17 ... 41
Electropolishing for stainless steel, Sept. 21 ... 184
Emergency installation to keep food warm. E. D. P. Gross, Sept. 21 ... *194
Engine heaters assure truck starting. R. T. Grunenwald, July 27 ... *132
Federal Housing Authority formula proves better for electric heating calculations (chart & tables) Nov. 2 ... *91
Fungus growth on sausages eliminated with germicidal lamps, Oct. 5 ... 140
Heat and fuel requirements for thermal-electric generation in 1960 (charts) (R) July 13 ... *150
Heat treating metal baler parts, Sept. 7 ... 132
Heating driers with oil-fired heat exchanger, Sept. 7 ... 132
House heating—amen on heating. S. R. Finley, Nov. 30 ... 148
House heating efficiency higher in colder weather? (charts) Nov. 2 ... *94
House heating in Canada. M. M. Foss, Aug. 24 ... 225
House heating—let's get the basic data (Ed) Nov. 2 ... 71
House heating load control. W. F. Friend (chart) Nov. 2 ... *88
House heating—local study of house heating load is essential. Taylor, Knox & Webb (charts) Nov. 2 ... *80
House heating—miscalculation. William Anderson, Dec. 14 ... 213
House heating of farm house. Jack Myers (table) Nov. 2 ... *83
House heating seems a desirable load for farm lines. V. R. Berry (tables) Nov. 2 ... *86
Immersion heaters and heating cables prevent water freezing in cooling tower, July 13 ... 176
Immersion heaters heats water, Dec. 14 ... 197
Immersion heaters help to clean printing press, Sept. 7 ... 132
Induction furnace melts aluminum ingots, July 13 ... 176
Induction heat steps up hardening 1000%, Nov. 16 ... *166
Induction heater for brazing blades for mixers, July 13 ... 174
Induction heating solders parts automatically. C. L. Stapel, Dec. 14 ... *180
Industrial heating use increases, Dec. 28 ... 77
Industrial space heating (Ed) Nov. 16 ... 104
Infrared baking aids mass production. C. L. Stapel, Oct. 5 ... *140
Infrared dries mats faster, Dec. 14 ... *184
Infrared dries tires evenly for recapping, July 27 ... *130
Infrared heaters improve candy, Aug. 24 ... *182
Infrared heating for paint drying, Nov. 17 ... 170
Infrared lamps lower moisture content of experimental papers, Aug. 24 ... 184
Infrared lamps prevent offsetting while printing, Sept. 21 ... 189
Infrared paint drying saves floor space. E. M. Wenner, Aug. 10 ... *148
Infrared speeds mold drying, Nov. 30 ... *132
Joining plastics with two dielectric heaters, Nov. 2 ... 140
Knife, electrically heated, cuts nylon cord, Dec. 14 ... 197
Melted steel in top-charging electric arc furnace, Oct. 19 ... 184
Melting furnace makes aluminum precision castings. G. C. Jamison, Sept. 7 ... *131
Metal melting for linotype machines, July 13 ... 174
Oil heated with immersion heater in coal preparation plant, Oct. 19 ... 184
Paint heated in electrically-heated bath, Nov. 30 ... 133
Panel heating experiences on Cleveland system (tables) Nov. 2 ... *84
Radiant glass heating for houses, Northfield, N. J. (table) Nov. 2 ... 80
Radiant infrared improves candy, Aug. 10 ... *150
Resistance heating to be promoted by American Gas & Electric. E. A. Snyder, Dec. 28 ... 100
Resistance heating ups tubing output. L. Albertson, Sept. 21 ... *184
Rod type resistance heaters maintain tar fluid, July 17 ... 132
Salt bath descaling, Nov. 16 ... 170
Sealing plastic films in wrapping by use of cartridge type heaters, Aug. 10 ... 150
Sidewalk electrically heated eliminates snow maintenance. R. L. Conboy, Oct. 19 ... *183
Single-phase indirect arc furnace spreads the load on three phases of incoming service. B. W. Schafer (charts & tables) Nov. 30 ... *92
Soil heating cable heats solution for product, Oct. 5 ... 142
Space heaters for shop offices, Dec. 14 ... 184
Space heating at colliery, Oct. 19 ... 183
Space heating load of Union Electric rising rapidly (charts & tables) Nov. 2 ... *92

(Ed) Editorial. * Illustrated. (N) News. (R) Reference Sheet.

Strip heater molasses warmer, July 6 ... *39
Strip heaters for grease kettles. C. L. Stapel, Oct. 5 ... *138
Strip heaters for heating presses, Nov. 16 ... 170
Strip heaters in gas-fired tunnel maintains even temperature in making aircraft products, Aug. 10 ... 152
Strip heaters to warm plant on week ends, Oct. 5 ... 140
Tacoma City Light lifts ban on electric heating (N) Aug. 3 ... 24
Tank heaters warm heavy asphalt. R. M. Pizza, Nov. 16 ... *166
Water heating in railway shop, Dec. 14 ... 197
Hillman Light, Power & Water Co.—One-man power company. Earl Elowsky, Dec. 7 ... *16
Hoover Commission—Moreell to head task force on water and power resources (N) Oct. 26 ... *8
Task Force assailed (N) Nov. 23 ... 7
Houston Lighting & Power Co.—rise in power (charts) July 6 ... *22

Hydro Electric Plants and Developments

Airfari for nine journalists to controversial private-public power hot spots, Dec. 21 ... *15
Alabama Power asks permits for 5 plants (N) Nov. 23 ... 7
Alaska-Grant Lake applies for license to build project at Grant Lake (N) Aug. 10 206 (N) Sept. 14 ... 24
Albright Station discussed (N) Nov. 2 ... 79
Aluminum firms use less Northwest power (N) Sept. 28 ... 47
Appalachian Electric Power's turbine maintenance aided by portable boom. C. D. McCarthy, Aug. 24 ... *166
BPA administrator describes 20 yr. contract offered private utilities (N) Sept. 14 ... 8
BPA and California-Oregon Power to complete jointly tie-line (N) July 6 ... 18
BPA determines the potential rise in station ground mats. M. J. Lantz (charts & tables) Dec. 14 ... *127
BPA's financial operation being investigated by General Accounting Office (N) Oct. 19 ... 134
BPA makes reduction in staff (N) Sept. 7 ... 73
BPA power contract revised (N) Sept. 7 ... 75
BPA—three utilities sign 20-yr. contracts (N) Sept. 28 ... *6
Brazil plans Rio Grande dam and powerhouse (N) Sept. 14 ... 24
Brazos River program for 4 dams studied (N) Oct. 12 ... 7
British Columbia to add power supply (N) July 13 ... 241
Budgets for TVA, REA, Corps of Engineers and Interior (tables) Aug. 3 ... 6
Cabinet Gorge Dam completed (N) Sept. 7 ... *72
California-Oregon Power orders two automatic hydro package plants (N) Aug. 24 ... 107
Canada
Calgary Power to complete reservoir project (N) Sept. 14 ... 22
Salmon to have underwater "traffic lights", Sept. 14 ... 24
Canadian metallurgical firm to build plant and smelter on Taku River (N) Aug. 17 ... 15
Canyon Ferry Dam construction (N) Aug. 10 ... *93
Canyon Ferry Dam plant has switchyard on top (N) Nov. 16 ... *107
Central Valley Project studied by USBR (N) Aug. 10 ... 203
Central Valley Project "worth" data to be provided (N) Nov. 30 ... 73
Chile-Los Molles penstock (N) Sept. 14 ... *21
Chile-Los Molles penstock—Chilean condition. Raul Saez S. Nov. 16 ... 194
Clark Hill power decision sets pattern for Southeast federal plants (N) Sept. 28 ... 9
Clark Hill power sales contract okayed by the Dept. of the Interior (N) July 13 ... 110
Clark Hill reservoir price approved (N) Sept. 21 ... 123
Columbia Basin Interagency Committee approves panel of governors of four states to work on regional projects (N) Oct. 5 ... 80
Columbia Basin states seek hydro pact (N) Sept. 7 ... 72
Dalles Dam—model shows "dry bed" view (N) Dec. 7 ... *9
Democratic senators criticize Republican power policy (N) Aug. 10 ... 91
Duke Power's land program preserves water, forests and soil, Sept. 28 ... *22
Europe's hydro potential (N) Aug. 3 ... 24
Falcon Dam dedication (N) Oct. 26 ... *7
Falcon Dam dedication ceremonies, Nov. 9 ... *15
Federal Power Act amendments change requirements of public hydro projects (N) Sept. 7 ... 73
Federal power policy: how administration attitudes compare—Democratic and Republican, Aug. 31 ... 7
Finland's power system (map) Nov. 9 ... *32
Fish guidance over dams to be studied by U. S. agency (N) Sept. 21 ... 123
Fish—salmon in British Columbia to have underwater "traffic lights", Sept. 14 ... 24
Folsom Dam-lower coffer dam gives way (N) Nov. 2 ... 78
Folsom power plant being built (N) Sept. 21 ... *122
France—consumption and development of electric power, July 6 ... *16
Guatemala—survey made for future hydro (N) July 6 ... 8
Hillman Light, Power & Water—one-man power company. Earl Elowsky, Dec. 7 ... *16
Hoist supports aid turbine pit maintenance. W. H. Brodie, Oct. 5 ... *122
Hoover Dam has low water mark (N) Aug. 31 ... *9
Hoover task force assailed (N) Nov. 23 ... 7
Hungry Horse Dam—fitting a rotor into a stator (N) Aug. 3 ... 9
Idaho Power asks fast write-off for two Snake River dams (N) Nov. 16. 108
Idaho Power's Hells Canyon dams—federal stand (N) Aug. 31 9 (N) Nov. 30 ... 74
Idaho Power's development of Hells Canyon, Snake River, discussed at hearing (N) July 13 108 (N) July 20 6 (N) Aug. 3 7 (N) Aug. 10 94 (N) Aug. 17 8 (N) Sept. 28 8 (N) Oct. 12 7 (N) Dec. 7 ... 9
Idaho Power—National Hells Canyon Assn. formed to oppose company's Snake River plan (N) July 6 7 (N) Sept. 14 33 (N) Sept. 21 121 (N) Dec 7 ... 24
Idaho Power—run-of-river plants instead of high Hells Canyon project recommended, (N) Dec. 28 ... 68
Idaho Power's Snake River plan opposed by Hells Canyon advocates (N) July 6 ... 7
Idaho Power's three dam plan for Snake River opposed by Cotton, engineer, who advocates one high dam (N) July 27 ... *82
Indiana & Michigan Electric hydro station—relay detects vibration in bull wheel. T. W. Dugdale, Dec. 14 ... *160
Japan's hydro power key to economy (map) Oct. 26 ... *22
King's River developments—Interior asks appeal dismissal of FPC grants (N) Nov. 16 ... 107
Lebanon irrigation project to be proposed by U. S. experts on Point 4 program (N) July 20 ... 29
McNary Dam flow scheduled for Dec. 1 (N) Sept. 7 ... 75
Mexico—village will soon disappear beneath power reservoir but parish will not be dispersed. Carlos Davila, Aug. 17 ... *30
Missouri basin area rules for power sales changed by Dept. of Interior (N) Sept. 28 ... 7
Missouri Basin—customers must make 20 yr. estimates of power needs by Jan. 1 (N) Nov. 16 ... 109
Missouri Basin power offered for sale by Bureau of Reclamation (N) Oct. 12 ... 8
Missouri Case revived as federal co-op power tie-up is appealed (N) Nov. 16 ... 110
Missouri River Basin marketing criteria eased, (N) Dec. 21 ... 7
Montana Power plans tie line with Thompson Falls plants (N) Sept. 14 ... 21
New Zealand's Maracetai hydro project is country's largest (N) Sept. 28 ... *14
Newfoundland Light & Power to construct project at Piper's Hole (N) Sept. 21 ... 123
Niagara-FPC case—Supreme Court puts off decision, (N), Dec. 21 ... 43
Niagara Falls bill for private development of river power (N) July 6 *6 (N) July 13 109 (N) July 20 ... *15
Niagara Falls development—Dewey testifies (N) Aug. 3 ... *15
Niagara Falls hearings reopened—Senate Public Works Committee gives state officials a chance to testify (N) July 27 ... 81
Niagara Falls—New York plan cited as "creeping socialism" (N) Nov. 9 ... 21
Niagara Falls—New York seeks court endorsement of state control over water rights, Oct. 26 ... 6
Niagara Falls—Public support campaign (N) Nov. 16 ... 110
Niagara Falls—3-way debate, (N), Dec. 21 ... *35
Niagara-Mohawk asks ok to export electric energy (N) Oct. 19 ... 110
Nimbus Dam power plant rising (N) Sept. 21 ... *122
Northeast hydro projects stir debates, Dec. 28 ... 84
Pacific Gas & Electric—Feather River's proposed dam (N) Aug. 17 ... *8
Pacific Gas & Electric gets 50 yr. license for Feather River project (N) Nov. 9 ... 8
Pacific Gas & Electric, irrigation district and engineer interested in Feather River project (N) Aug. 10. 202
Pacific Gas & Electric to continue to distribute power to certain Hetch Hetchy customers (N) July 13 ... 236
Pacific Northwest companies to enter into partnership with government to construct projects (N) Dec. 14 ... 119
Pacific Northwest power policy—letter from Pres. Eisenhower, (N), Dec. 28 ... 67
Pacific Power & Light rushing Yale project (N) July 6 ... *24
Pennsylvania Water & Power's plan to divert hydro electric power to be heard (N) Sept. 14 ... 9
Pilot Butte plant "slush plows" prevent ice-blocked channel, Dec. 28 ... *118
Pine Flat Dam, Calif. cableway places concrete, Nov. 2 ... *114
Portland General Electric repairing damage at Faraday plant (N) July 20 ... *9
Portland General Electric's Station G cleans moss from flume by hydraulic pressure. G. K. Merz, Aug. 24 ... *158
Public Service Co. of Indiana—Wabash River station work advances (N) Dec. 14 ... *119
Republican Administration changes the course of federal power policy (Ed) 100, Aug. 24 ... *102
Roanoke Rapids Dam work advances (N) Aug. 31 ... *10
Roanoke Rapids tax write-off investigation asked (N) Sept. 7 ... 71
Rocky Reach Dam—to be built by PUD in partnership with government, (N), Dec. 21 ... 43
St. Lawrence license rejected by FPC (N) July 20 15 (N) Sept. 14 ... 7
St. Lawrence plans move ahead—N. Y. Power Authority retains two engineering firms, Nov. 16 ... *106
St. Lawrence project—date set for hearing (N) Nov. 30 ... 74
St. Lawrence project opposed by four groups (N) Aug. 24 ... 105
St. Lawrence project paper work (N) Aug. 17 ... *15
Scotland hydro board to construct project in Sutherland (N) Aug. 17 ... 15
Seattle City Light hauls equipment to Skagit River powerhouse (N) Aug. 31 ... *34
Senate increases funds for power (table) July 6 ... 9
Small hydro sites can be developed economically. H. H. Gnuse, Jr., Sept. 7 ... *80
South Carolina Electric & Gas provides recreational area near Saluda Dam (N) Aug. 24 ... *108
South Korea power expansion, Nov. 9. 18
Southeastern Power Administration—private power gains in Southeast, Dec. 28 ... 85
Southern California Edison Co.'s Vermilion reservoir site clearing (N) July 13 ... 238
Southwest Power Administration—Federal power slows in Southwest, Dec. 28 ... 83
Southwestern Power Administration's three high lines knocked down (N) Sept. 14 ... 18
Southwestern Power Admin.—up rates, low water (table) Nov. 23 ... 6
Tacoma City Light's Alder Dam eroding spillway saved by concrete and skip-dam. Oct. 19 ... *139
Tacoma City Light's Cushman hydro plant's tower footing conquer swamp, Oct. 5 ... *94
Tacoma City Light—right to build two dams contested (N) Dec. 7 ... 18
TVA Act of 1933 amendment explained by Dondero (N) Sept. 14 ... 9
TVA being sued by Volunteer Electric Co-op (N) Oct. 26 ... 7
TVA control by the government will be rejected says utility president (N) July 13 ... 240
TVA development situation criticized by governor (N) Aug. 10 ... 91
TVA—Eisenhower still wary (N) Oct. 19 ... *107
TVA facilities operation provided in Alabama bill if government gives up plants (N) Sept. 21 ... 122
TVA's microwave—the backbone of expanded communications. G. E. Farmer, Oct. 19 ... *124
TVA's net income (N) Oct. 12 ... 21
TVA should be run on business basis says C. H. Moses (N) Sept. 21 ... 122
TVA tax write-offs defended by chairman (N) Oct. 12 ... 8
U. S. Bureau of Reclamation faces overhaul (N) Aug. 24 ... 105
U. S. Bureau of Reclamation places $8 million in reserve for 25 projects (N) Sept. 28 ... 7
U. S. Bureau of Reclamation reorganizing Sacramento office (N) July 20 ... *20
Wagon Wheel Gap project in Colorado rejected (N) Aug. 31 ... 18
Washington State Operating Agency No. 1 formed (N) Nov. 23 ... 24

(Ed) Editorial. * Illustrated. (N) News. (R) Reference Sheet.

Washington Water Power saves pole height by sloping crossarms. G. R. George, Nov. 16 ..... *144
Yugoslavia to export power (N) Sept. 4 34

I

Idaho Power Co.—Folding hoist speeds oil filter changing. George Young, Sept. 21 ..... *172
One digger loads poles, digs holes, erects poles, July 27 ..... *129
Oversized auger digs large hole quickly, Sept. 7 ..... *110
To lease Utah Power & Light unit (N) July 27 ..... *80
Idaho Power see also Hydro-electric plants and developments
Illinois Power Co.—air patrols proves economical and effective. E. A. Schultz, July 27 ..... *112
Increases generating capacity fifteen-fold since 1947 (chart & map) Aug. 3 ..... *22
Illuminating Engineering Society
National Technical Conference (N) Sept. 28 ..... *35
Technical Conference of Committee on Aviation Lighting discusses research and development, Nov. 16 ..... *168
Imports—General Electric & Westinghouse ask for protection against imports, (N), Dec. 28 65
Survey by NEMA shows rapid rise for electrical imports, (N), (charts), Dec. 21 6
Indiana Electric Assn.
Meeting—EEI president asks tax equality (N) Oct. 26 ..... *43
Indiana & Michigan Electric conducting classes on how to handle hot lines, Sept. 14 ..... *16
Demonstrates hazards of high-lines by models. J. F. Phelan, Dec. 7 ..... *32
Electrical breaker racker saves time. Brown & Trippy, July 27 ..... *120
Portable radio receivers aid crews, show savings. J. H. Gieson, Dec. 28 *120
Relay detects excessive vibration in bull wheel. T. W. Dugdale, Dec. 14 .. *160
Industrial Electric Exposition (N) Oct. 19 ..... *110
Industrial power—Large light and power sales up (charts) Sept. 21 ..... *142
Industrial Relations Committee
Annual conference warns of threat of government in business (N) Oct. 26 ..... *34

Industrial Services

All-electric recreation building builds employee morale. L. B. Reed, Sept. 21 ..... *180
Bituminous Coal Research and fourteen utility companies survey indicates electric furnaces would benefit both industries (N) Aug. 24 106
Can lifting magnets be supercharged? A. M. Holcomb, Dec. 14 ..... *180
Curing rubber insulation on wire with steam from an electric steam boiler, Aug. 10 150
Electronic sorting improves coffee quality. O. V. Baldwin, Nov. 30 ..... *130
Rug cleaning machine increases production over 200%. C. T. Ballard, Aug. 10 ..... *148

Insulating Oils

Aging tests compare transformer oil performance. Schofield & Carver, Nov. 30 ..... *81
Folding hoist speeds oil filter changing. George Young, Sept. 21 ..... *172
Progressive oil purification saves clay and cuts costs. A. M. McCabe, Aug. 24 ..... *158

Insulation

Curing rubber insulation on wire with steam from an electric steam boiler, Aug. 10 150
Dc instrument tests recloser insulation. R. W. Bethke, Dec. 14 ..... *164
Dust coatings on pole insulators caused power outages (N) Sept. 21 .. 123
Modern transmission design—probabilities set insulation levels. C. E. Wagner, Aug. 24 ..... *117
PEA's joint meeting discusses insulati coordination (N) Oct. 19 ..... *108
Silicone-glass insulation solves Consolidated Edison's Astoria plant problems. J. G. Noest, Nov. 16 ..... *112
Wire stripper pays itself in first few days. Jack Shepard, Aug. 10 ..... *134

Interconnection

Atlantic City Electric helped by Pennsylvania-New Jersey interconnection. W. F. Caven (charts) Dec. 14 ..... *138
Congress OKs change in Federal Power Act (N) Aug. 10 94
Detroit Edison, Ontario Hydro ready to interchange (N) Aug. 31 9
Interstate Power Co. and Northern States Power plant two interconnections (N) Aug. 17 15
Pacific Northwest-California intertie found feasible reports FPC (N) July 20 8
International Assn. of Electric Leagues holds conference (N) Aug. 17 18
Interstate Power to build line (N) Sept. 14 15
Interstate Power Club meeting (N) Nov. 2 ..... *136
Inventory—43-company study shows utility inventories have been cut (chart) Oct. 26 47
Iowa Electric Light & Power Co.—selling appliances on the point system, Aug. 10 ..... *156
Iowa-Illinois Gas & Electric Co.
Rates change, Dec. 14 143

J

Japan
Hydro power: key to Japan's economy (map) Oct. 26 ..... *22
Jersey Central Power & Light—municipal officials tour plant (N) Nov. 23 24
Tripod derrick saves storage space on truck. W. E. McGowan. Oct. 5 ..... *124

K

Kansas City Power & Light—Putting first things first. J. M. Stafford, Jr., Aug. 24 ..... *220
Kansas Gas & Electric Co.—Card system simplifies maintenance scheduling. A. W. Hall, Oct. 19 ..... *154
Consistent effort sells light conditioning. H. W. Hobson, July 27 ..... *134
Murray Gill steam plant in operation (N) Dec. 7 18
Kansas Power & Light—Infrared dries tires evenly for recapping, July 27 .. *130
Korea
South Korea power expansion, Nov. 9 18

L

Lights and Lighting

Air conditioning and lighting design coordinated. E. R. Dodson, Nov. 2 .. *132
Airport lighting aided by molded transformers, Dec. 28 ..... *116
Atlantic City Electric floodmobile carries lighting theme, Nov. 30 ..... *128
Atlantic City Electric lights up main building. J. J. Tynan, Sept. 14 ..... *37
Bank relighting blends into architecture. Snook & Gunther, July 6 ..... *38
Campaign sells light conditioning. H. W. Hobson, July 27 ..... *134
Central Hudson Gas & Electric makes awards in lamp contest (N) July 20 ..... *18
Commercial lighting promotion. H. P. Lang, Oct. 26 ..... *38
Corning Glass prepares lighting handbook (N) Oct. 12 41
Data sheets sell home town lighting. J. D. Haverkamp, Dec. 14 ..... *170
Denver—Christmas outdoor lighting contest, (N) Dec. 21 ..... *22
"Diamond Jubilee" emblem (N) Sept. 21 ..... *121
Diamond Jubilee of Light (ed) Oct. 5 75
"Diamond Jubilee of Light" on ice (N) Sept. 14 ..... *18
Diamond Jubilee—Charles Wilson heads committee (N) Nov. 2 75
Electrical Construction and Maintenance magazine contest winners announced (N) Sept. 14 ..... *8
First night baseball game under lights was seventy years ago (N) July 27 ..... *104
Fluorescents light Seattle viaduct, July 27 ..... *136
Fluorescent lighting for Japanese Imperial household (N) Nov. 23 31
General Electric may appeal incandescent patent verdict (N) Oct. 12 43
Georgia Tech relights drafting classroom. S. J. Andre, Oct. 19 ..... *168
Good enough in lighting sales? (Ed) Aug. 10 87
How utilities are selling commercial and industrial lighting (tables) Aug. 10 ..... *99-122
IES publishes new guide for home lighting, Dec. 14 176
Incandescents for Missouri market. R. W. Renkel, Oct. 12 ..... *41
Inspection lighting with black light, Sept. 21 189
Lamp program launches on nation-wide basis (N) Aug. 17 41
Louisiana Power & Light adds $300,000 annual revenue with campaign. J. E. Fort, Nov. 30 ..... *126
Luminous ceiling is no "expensive innovation". Laurence Urdang, Nov. 30 148
Machine shop lighting is overhead. R. W. Renkel, Nov. 2 ..... *134
Mercury vapor lighting speeds safety in cities, Oct. 19 172
Modern lighting at Industrial Aids Inc., July 27 132
National Technical of the IES features most original lighting jobs (N) Sept. 28 ..... *38
New high level illumination in engineering department, July 27 132
New Orleans Public Service plans entry for EEI award. E. R. Tschirn, Nov. 23 ..... *29
Northwest Airlines hangar lighting, Nov. 16 170
Reflector lights aid truck safety. Vivian Bushong, July 27 ..... *124
Runway lighting package developed for small airports (N) Aug. 17 43
Selling the relighting market (picture feature) Aug. 10 ..... *102
Shadow, glare problems solved for Portland, Ore. steel bridge (N) Aug. 3 ..... *39
Street lighting—Baltimore has mercury vapor street lights. Tome & Straus, Nov. 30 ..... *104
Broadway Maintenance Corp. keeps the white in the Great White Way (N) Sept. 14 ..... *22
German toy mart illuminated again, (N), Dec. 21 ..... *9
Lift truck speeds lamp maintenance, Aug. 24 ..... *176
New York City's Avenue of the Americas new lighting system, (N), Dec. 28 ..... *67
Schenectady gets new lights, Oct. 5 .*136
Single-ballast street light system costs less. M. C. Harsh, Nov. 30 ... *114
Tennessee Valley brightness its streets, Oct. 5 ..... *135
Truck platform extending over cars speeds maintenance, Aug. 10 ..... *130
Superior Dairy improves production with good lighting, Nov. 30 133
Ultraviolet light introduction decontaminates parts, increases efficiency. Richard Hatfield, Nov. 30 ..... *130
Upward component lighting can increase industrial lighting levels. W. H. Kahler, Oct. 19 ..... *118
Warehouse and vehicle maintenance shop of Eugene Water & Electric Board lighted expensively. J. F. Whitney, Sept. 7 ..... *90
Welcome to National Lighting Bureau (Ed) July 27 78
Window lighting increase results from traffic count. Douglas Johnson, July 6 ..... *39

Load

Average residential loads (charts) Dec. 7 41
Calculator replaces daily load schedule. C. H. Conrad, Aug. 10 ..... *127
Dallas Power & Light's method of estimating transformer loads, Nov. 16 ..... *116
Federal Housing Authority formula proves better for electric heating calculations (charts & tables) Nov. 2 ..... *91
House heating efficiency higher in colder weather? (charts) Nov. 2 ... *94
House heating load control. W. F. Friend (chart) Nov. 2 ..... *88
House heating load study by the Atlantic City Electric Co. Taylor, Knox & Webb (charts) Nov. 2 ..... *80
Panel heating experiences on Cleveland system (tables) Nov. 2 ..... *84
Single-phase load split on 3 phases by arc furnace. B. W. Schafer (charts & tables) Nov. 30 92
Space heating load of Union Electric rising rapidly (charts & tables) Nov. 2 ..... *92
Load building—House heating seems a desirable load for farm lines. V. R. Beery (tables) Nov. 2 ..... *86
Window lighting increase results from traffic count. Douglas Johnson, July 6 ..... *39
Long Island Lighting Co.'s new central operating headquarters (N) July 6 .. *34
New headquarters built to expand with operating needs. A. J. Pansini, Dec. 14 ..... *134
Los Angeles Dept. of Water & Power—All-electric facilities build employee morale. L. B. Reed, Sept. 21 ..... *80
Load centers and bus duct provide flexibility, Oct. 19 ..... *174
Over-sized puller aids fuse replacement. I. E. Goodner, July 13 ..... *156
Permanently sealed subway transformers adopted. J. R. Kelley, Oct. 19 ..... *139
Louisiana Power & Light Co.—115-kv conductor repaired in 14 min. W. L. Rush, Dec. 14 ..... *156
Nine-Mile-Point plant addition (N) Nov. 23 24
Louisville Gas & Electric—dynamite believed cause of transformer blast (N) Oct. 5 83

M

Maintenance scheduled with records on cards. A. W. Hall, Oct. 19 ..... *154

Management

Apply operating practices for savings (R) Sept. 7 106

(Ed) Editorial. * Illustrated. (N) News. (R) Reference Sheet.

Arizona supervisors train themselves. Keith Turley, July 20 ..... *22
Carnegie Institute of Technology offers "Program for Executives" (N) Dec. 7 39
Georgia Power sees two sides to progress: technical and social, Oct. 12 ..... *22
Government in business No. 1 problem warns Industrial Relations Committee (N) Oct. 26 ..... *34
Hillman Light, Power & Water—one-man power company. Earl Elowsky, Dec. 7 ..... *16
Management trains for new tasks, Dec. 28 91
Modern managers need more skills (Ed) July 13 106
Review and renew efforts, (Ed), Dec. 28 61
Utility executives take course on management sponsored by Southeastern Electric Exchange (N) July 27 ..... *84
Maryland Utilities Assn.—43% rise in power sales by '58 predicted (N) Sept. 28 14

Materials handling

Conveyor delivers coal from mine to plant at Columbus Southern Ohio Electric, Nov. 30 ..... *116
Dollies make meter box handling easier, July 13 ..... *152
Electric fork trucks handle television tubes, Aug. 10 150
Folding hoist speeds oil filter changing. George Young, Sept. 21 ..... *172
Jacks lift 15,000-lb cable reels. C. G. Newman, Dec. 28 ..... *123
Line jeep power winch handles 80-ft poles. Vivian Bushong, Sept. 7 ..... *118
Loaded reels lifted easily at Arizona Public Service. William Norred, Nov. 30 ..... *108
Mechanization makes potato chips better and faster. J. H. Riisness, July 27 ..... *130
Mobile cradle handles heavy chainfall. E. J. Magyar, Oct. 19 159
Ohio Power—boom extends usefulness of fork-lift truck. Kemple & Davis, Nov. 30 ..... *114
Portable boom aids turbine maintenance. C. D. McCarthy, Aug. 24 ..... *166
Refrigerating trucks with electric motorized unit, Nov. 30 132
Tramp-iron protector stops coal belt tears. C. B. Watson, Aug. 10 ..... *134
Materials handling see also Trucks
McGraw, Curtis W. president of McGraw-Hill dies, Sept. 21 ..... *116
McGraw, Donald C. elected president of McGraw-Hill (N) Sept. 28 ..... *7

Meters and Measuring

Consumer Public Power meter cutoff simplifies chart removal schedule. F. C. Hush, Nov. 16 ..... *144
Dollies make meter box handling easier, July 13 ..... *132
Duquesne Light develops new three-phase meter box (N) Nov. 2 ..... *79
Georgia Power develops device for measuring small voltage variations. R. W. Baker (charts) Nov. 30 94
Old washing machine cleans meter covers better. P. F. Jones Jr., Sept. 7 ..... *108
Oscillograph tests high-speed air-blast breakers. Frank Kunze, Nov. 2 ..... *107
Pennsylvania Power meter handling methods save time of five men. E. H. Tyson, Nov. 16 ..... *152
Quick-connection terminals aid A-base meter testing. H. D. Rippl, Dec. 28 ..... *108
Standardization of meters discussed at EEI and AEIC meeting (N) Nov. 2 ..... *76
Stop prevents over registration of demand-printing meter. M. R. Yarger, Oct. 19 ..... *142
Surveying tapes calibrated accurately and fast, Oct. 5 ..... *120
Test socket takes five different thermal meters. Bowman & Gaenicke, Nov. 2 ..... *118
Varhour meter phase angles checked by standard test set. Charles Van Luvanee, Sept. 21 ..... *170

Microwaves

The backbone of TVA's expanded communications. G. E. Farmer, Oct. 19 ..... *124
Engine-motor-flywheel power unit for microwave systems. B. W. David (charts) Oct. 19 ..... *128
Microwave net contracts (map) Aug. 31 ..... *47
Southern California Edison to install microwave system (N) Sept. 14 24
TVA's new microwave facilities (N) Oct. 12 ..... *21
Mid-Century Conference on Resources—Parley boycotted by five pro-public power groups (N) Dec. 7 9
Round-table discussion on energy (N) Dec. 14 ..... *116
Mississippi Power & Light—Cooling pond for Delta plant proves cheaper. R. W. Braswell (tables) Nov. 30 ..... *84
Installs transformers in Delta in 51 hours. (N), Dec. 21 ..... *32

Models

Dalles Dam model shows "dry bed" view (N) Dec. 7 ..... *9
Indiana & Michigan Electric uses models to demonstrate high-line hazards. J. F. Phelan, Dec. 7 ..... *32
Northern States displays model electric farms, Sept. 21 ..... *194
Relief model simplifies substation grading and location. M. C. Gallyano, Sept. 7 ..... *103
Monongahela Power Co.—lighting promotion. H. P. Lang, Oct. 26 ..... *38
Montana Power Co.—offers coupons to rural customers toward purchase of appliances. D. J. McGonigle, July 13 ..... *180
Montaup Electric Co.—wholesale generation not "unique" (Ed) Sept. 21 116
Motors—Baling tin cans with motor driven hydraulic press, Dec. 14 184
Sawdust blasting cleans motor windings, July 13 ..... *148
Mountain States Power signs 20-year contract with BPA (N) Sept. 28 ..... *6
Municipal ownership—Eugene Water & Electric Board engages in direct competition with Mountain States Power (N) Aug. 3 ..... *8

N

Nantahala Power & Light—small hydro sites can be developed economically. H. H. Gnuse Jr., Sept. 7 ..... *80
National Assn. of Electric Companies—sponsors airfari for nine journalists to controversial private-public power hot spots, Dec. 21 ..... *15
National Assn. of Railroad & Utilities Commissioners New York City meeting (N) Oct. 5 105
National Electric Consumers Conference—public power groups plan for federation, (N), Dec. 21 ..... *8
National Electrical Manufacturers Assn. Meeting (N) Nov. 16 ..... *108
Meeting sees big electrification advances ahead (N) Nov. 23 ..... *9
Survey shows rapid rise for electrical imports, (N), (charts), Dec. 21 6
National Farm Electrification Conference Research is keynote (N) Nov. 9 ..... *9
National Manpower Council—Safeguard human relations warns conference (N) Nov. 9 22
National Rural Electric Cooperative Assn. meeting (N) Sept. 21 ..... *119
Network—Great Britain inaugurates 275-kv supergrid. J. H. M. Sykes, Aug. 31 ..... *32
New England Power Services Co.—catenary speeds service restoration after tornado, July 27 ..... *122
Tower damage provides key to Worcester tornado data. C. A. Booker, Aug. 17 ..... *22
New Jersey Utilities Assn.—Meeting discusses water supply (N) Nov. 30 75
New Orleans Public Service—Data sheets sell home town lighting. J. D. Haverkamp, Dec. 14 ..... *170
Mobile transformer units reduce outages 75%. E. F. Mayo, Aug. 24 ..... *154
Planning an entry for EEI lighting award. E. R. Tschirn, Nov. 23 ..... *29
Prods dealers for the maximum market, Sept. 7 136
Niagara Mohawk Power Corp.—geiger counter locates hidden pull box. F. H. MacGinnis, July 13 ..... *169
Truck platform extending over cars speeds street light maintenance, Aug. 10 ..... *130
Northern Natural Gas Co. vs FPC case decision rate of return tolley reversed. C. P. Guercken, Sept. 7 97
Northern States Power Co.—Model electric farm, Sept. 21 ..... *194
Nuclear Power Co.—5 companies form firm to produce electricity from atomic power (N) Dec. 14 118

O

Office of Defense Mobilization—plans for bomb attack on industry, Oct. 12 6
Ohio Power—Boom extends usefullness of fork-lift truck. Kemple & Davis, Nov. 30 ..... *114
Container extends paint brush life. J. W. Brush, Sept. 7 ..... *110
Mobile cradle handles heavy chainfall. E. J. Magyar, Oct. 19 159
Quick-connection terminals aid A-base meter testing. H. D. Rippl, Dec. 28 ..... *108
Special receiver locates interference sources. F. L. Greene, Oct. 5 ..... *111
Stops prevents over registration of demand-printing meter. M. R. Yarger, Oct. 19 ..... *142
Tramp-iron protector stops coal belt tears. C. B. Watson, Aug. 10 ..... *134
Ohio Valley Electric will supply power to AEC at Portsmouth (N) Oct. 5 101
Oklahoma Gas & Electric—header sections replaced with elbows. Wm. Cowan, Aug. 24 ..... *178
Trip unit when excitation is lost. G. E. Taylor, Oct. 5 ..... *96
Omaha Public Power District—mechanization makes potato chips better and faster. J. H. Riisness, July 27 ..... *130

P

Pacific Coast Electrical Assn.—Hawaiian Conference stresses mutuality in electric industry, Dec. 7 ..... *6
Pacific Gas & Electric—boosts wages 3½% (N) Dec. 7 39
Boring machine "lays" pipe, Nov. 30 ..... *125
Device detects current in disconnect switch. Dilberger & Meldrin, Aug. 10 ..... *142
Mobile substations used for eleven years by the company. R. F. Stuart, Oct. 19 ..... *150
New Moraga-San Mateo cable strung between towers across San Francisco bay (N) Aug. 3 ..... *16
No communists wanted (Ed) Sept. 7 68
Peak load (N) Sept. 21 123
Standard test set checks varhour meter phase angles. Charles Van Luvanee, Sept. 21 ..... *170
Teaching utility drivers to be safe. E. F. Hockenbeamer, July 20 ..... *16
Pacific Northwest power companies to enter into partnership with government to construct hydroelectric projects (N) Dec. 14 119
Pacific Power & Light signs 20-yr contract with BPA (N) Sept. 28 ..... *6
Starts work on BPA tie line (N) Sept. 14 21
To construct intertie line (N) Dec. 7 18
Painting time cut by using roller on fence, July 27 ..... *116
Patents—General Electric may appeal lamp verdict (N) Oct. 12 43
Pennsylvania Electric Assn.—Communication Committee meeting (N) Nov. 9 8
Joint meeting discusses insulation coordination (N) Oct. 19 ..... *108
Meets (N) Oct. 5 ..... *78
Relay Committee meeting discusses problems (N) Oct. 12 18
System Planning Committee discusses system reactive supply and voltage control (N) Oct. 19 109
Pennsylvania Electric Co.—Banked secondary serves residential customers better. Ager & Ramandanes, July 27 ..... *90
Calculator replaces daily load schedule. C. H. Conrad, Aug. 10 ..... *127
First 230-kv transmission line and substation placed in operation, (N), Dec. 21 43
New dispatching center. C. H. Conrad, Dec. 28 ..... *94
Pennsylvania Power & Light—meter handling methods save time of five men. E. H. Tyson, Nov. 16 ..... *152
To furnish power for new Foster Wheeler plant (N) Dec. 7 ..... *44
Pennsylvania Water & Power—suit dismissed against Consolidated Gas Electric Light & Power Co. of Baltimore, (N), Dec. 28 65
Philadelphia Electric Co.—air conditioning cuts dampness. L. Albertson, Sept. 7 ..... *131
Fire system protects waterless station, Nov. 16 ..... *143
Receives Foreign Traders Award (N) Oct. 5 ..... *102
To construct substation (N) Sept. 14 34
Poles—Line jeep power winch handles 80-ft poles. Vivian Bushong, Sept. 7 ..... *118
Making concrete poles in Germany. Andreas Kemmelmaier, Dec. 28 ..... *92
Portland General Electric—clean moss from flume in 13½ hours. G. K. Merz, Aug. 24 ..... *158
Signs 20-year contract with BPA (N) Sept. 28 ..... *6
Potomac Electric Power Co.—Cutting asbestos board with overhung saw. W. B. Sullivan, Dec. 14 ..... *160
Lays 5 cables across the Potomac in 2 hr. 40 min. Moran & Dannettell, Nov. 30 ..... *89
Rain spouting holds lamp changers on truck. P. N. Woodson, Oct. 5 ..... *126
Wire racks multiply globe carrying capacity. P. N. Woodson, Oct. 19 166
Power Distribution Conference—Meeting discusses distribution system planning (N) Nov. 2 ..... *77
Power factor—Capacitor frontiers still expanding. Rydbeck & Hendrickson (charts) Sept. 7 ..... *86
Power Sales
43% rise in power sales by '58 predicted (N) Sept. 28 14
Large light and power sales up (charts) Sept. 21 ..... *142
Miscellaneous power sales, Sept. 21 ..... *141
Missouri Basin River power offered by Bureau of Reclamation (N) Oct. 12 8
Small light and power sales (charts) Sept. 21 ..... *140

(Ed) Editorial. * Illustrated. (N) News. (R) Reference Sheet.

Power Supply

American Public Power Asn. compares operating statistics of publicly and privately owned electric utilities (tables) Aug. 3 35
EEI forecasts 17.1% power reserve (N) (chart) Dec. 14 120
Finland's power system (map) Nov. 9 ..... *32
A half century that electrified the Rocky Mountain area, Nov. 23 ..... *22
Hoover Commission to scrutinize federal power policy (N) Aug. 17 9
Michigan's upper peninsula confronted with lack of electric power (N) Aug. 31 14
New era in electrical industry growth (chart & table) Sept. 21 134
Republican Administration changes the course of federal power policy, Aug. 24 ..... *102
(Ed) 100
World's power shortages becoming less acute, Dec. 28 90
"Yugoslavia to export power"—correction. P. H. Cnase, Nov. 2 156

Public Relations

American Gas & Electric safety manual. A. M. Perry, Nov. 23 16
Assn. of Edison Illuminating Companies sees utilities assuming civic duties (N) Oct. 26 ..... *9
Carolina Power & Light Co. sponsers farm development contest (N) July 27 104
Champion Home Town Contest held by Georgia Power Co.—everybody won (Ed) Dec. 14 114
Companies adopt fuller programs. Dec. 28 87
Detroit customers helped with inadequate wiring, Sept. 21 ..... *190
Duke Power's land program preserves water, forests and soil, Sept. 28 ..... *22
Edison National Park to be established (N) Nov. 23 24
Georgia Power sees two sides to progress: technical and social, Oct. 12 ..... *22
PIP 4th Conference—Electrical World report, Nov. 16 ..... *130
Safeguard human relations, National Manpower Council (N) Nov. 9 22
South Carolina Electric & Gas provides recreational area near Saluda Dam (N) Aug. 24 ..... *108
Trees to make everybody happy (Ed) July 13 106
Public Service Co. of Colorado—Arapahoe plant addition (N) Nov. 9 ..... *41
New bench speeds instrument transformer testing. J. T. Lang, Aug. 24 ..... *166
Public Service Co. of Indiana—Wabash River station work advances (N) Dec. 14 ..... *119
Public Service of New Hampshire—new unit for Schiller Station (N) Nov. 16 ..... *109
Public Service Electric & Gas—control system provides position indication and circuit supervision. I. D. Perry, Sept. 7 ..... *108
11-mile pipe cable completes 132-kv loop in New Jersey. Carmichael & Starrs, Sept. 7 ..... *76

Public Utilities

Electrical industry forecast for 1954-63. Fischer Black (chart) Sept. 21 ..... *131
Financial analyst on the utility beat. Harold Young, Sept. 28 ..... *16
43-company study shows utility inventories have been cut (chart) Oct. 26 47
The industry's performance in 1953. Walter Sammis reports, Dec. 28 ..... *64

Public Utility Districts

Chelan County PUD asks permission for dam on Columbia River (N) Dec. 7 18
Condemnation by PUD of Chelan plant upheld (N) Dec. 7 18
Cowlitz County PID adopts budget (N) Sept. 21 123
Sacramento Municipal Utility District—test socket takes five different meters. Bowman & Gaenicke, Nov. 2 ..... *118
Two Washington PUDS arrange to supply power to oil refinery (N) Aug. 24 107
Washington State agency to build dams considered (N) Nov. 2 76
Puget Sound Power & Light—Central shop repairs transformers, July 6 ..... *32
Company decides to operate separately (N) Nov. 23 47
FPC cancels hearing on merger (N) Nov. 16 108
Hearings end on merger (N) Aug. 24 111
Merger hearings reopen (N) July 20 .. 44
(N) Aug 17 48
Merger with Washington Water Power may lead to rate hike (N) Aug. 3 .. 45
Merger with Washington Water Power queried (N) July 27 107
Spokane union backs WWP-Puget merger (N) July 20 39
Supreme Court will rule on right of PUDs to buy company (N) July 6 .. 44
Washington court allows joint acquisition of private power facilities (N) Sept. 21 126
Washington Water Power to take over company (N) Oct. 26 45
West sees merger try and 20-year pact, Dec. 28 82
Pumps—Air ejector primes circulating water pump. H. A. Dilberger, Sept. 7 ..... *103
Motor driven pump for dairy advertised by Atlantic City Electric (N) Nov. 9 ..... *40

R

Radio—Engineers try radio recruiting, Oct. 12 ..... *16
Special receiver locates interference sources. F. L. Greene, Oct. 5 ..... *111

Radio Communication

Microwave—the backbone of TVA's expanded communications. G. E. Farmer, Oct. 19 ..... *124
PEA meeting discusses communications under emergency conditions (N) Nov. 9 8
Portable radio receivers aid crews, show savings. J. H. Gleson, Dec. 28 ..... *120
U. S. Navy installation at Jim Creek Valley, Wash. is world's most powerful transmitter (N) Nov. 30 ... *74
Radio communication see also Microwaves
Railroads—electrification. British railways try out 50 cycles (N) Nov. 23 ..... *8

Rates

BPA official forecasts rise in wholesale rates (N) Oct. 5 83
Central Maine Power rate hike, (N), Dec. 21 47
Central Power & Light cuts billing costs $20,000 a year. N. A. Easter, Oct. 26 ..... *32
Connecticut Light & Power rates raised, Nov. 2 101
Florida rate verdict may have wide effect. C. P. Guercken, Sept. 28 44
Georgia Power & Light allowed rate increase, Nov. 16 137
Illinois becomes a "fair value" state (Ed) July 13 106
Iowa-Illinois Gas & Electric Co. rates change, Dec. 14 143
Management at the crossroads (Ed) Nov. 2 72
Oregon private utilities billing hearings ended (N) Sept. 21 126
Oregon utilities sued for over collection of surcharges (N) Aug. 17 48
Oregon utilities upheld on surcharges (N) Nov. 30 74
Overall rate view needed. C. H. Shaw, Dec. 14 213
Residential electric bills in 21 cities 1943 and 1953 (table) Sept. 21 125
Southwestern Power Admin.—up rates, low water (table) Nov. 23 6
Reddy Kilowatt's rhetoric ratified. E. T. Hughes, Sept. 21 ..... *227
Reddy Kilowatt—"Me" and "I". V. W. Shear, July 27 ..... *148
Reddy Kilowatt and Willie Wirehand to meet in federal court fight (N) July 27 104

Regulation

Denver votes for state PUC regulation (N) July 6 44
Illinois reaffirms "fair value" stand, Dec. 28 86
Niagara Falls—New York seeks court endorsement of state control over water rights, Oct. 26 6

Relays

Oklahoma Gas & Electric generators equipped with relays to remove them when excitation is lost. G.E. Taylor, Oct. 5 ..... *96
Portable set tests overcurrent relays. E. J. Emmerling, July 27 ..... *100
Problems discussed at Pennsylvania Electric Assn. meeting (N) Oct. 12 18
Relay boards with sectionalized panels at substation, July 13 ..... *142
Standardizing relays. J. R. Linders, Aug. 24 220
Vibration in bull wheels at hydro station detected by relay. T. W. Dugdale, Dec. 14 ..... *160
Residential use—Increased use of electricity by residential customers (charts) Sept. 21 ..... *136
Riverside Electric Light Dept.—wire stripper pays for itself in first few days. Jack Shepard, Aug. 10 ..... *134
Rocky Mountain Electrical League convention (N) Oct. 5 ..... *81
A half century that electrified the Rocky Mountain area. Nov. 23 ..... *22

Rural Electrification

Arkansas Co-op to shift plant site to Oklahoma to sidestep Supreme Court ruling (N) Sept. 28 9
Atlantic City Electric's rural selling program (N) Nov. 9 ..... *40
Automatic feed grinding, processing and handling carried on at Wisconsin Electric Research Farm. L. A. Brooks, July 20 ..... *42
Barn cleaning electric installation, Aug. 3 39
British experiment with electric farm aids. J. H. M. Sykes, Aug. 3 ..... *38
Carolina Power & Light Co. sponsors farm development contest (N) July 27 104
Central Electric Power Co-op seeks to enforce pact made with SPA (N) Nov. 9 9
Consumers Power tells what price farm power (N) Sept. 14 38
East Kentucky Rural Electric to build transmission network (N) July 6 .. 35
Farm electrification is not a self-starter (Ed) Nov. 16 104
Farm home electric heating. Jack Myers (table) Nov. 2 ..... *83
Feeding cows by the belt system, Aug. 10 ..... *158
Henry County Rural Electric Membership Corp. to carry on as independent business, Sept. 14 ..... *32
House heating seems a desirable load for farm lines. V. R. Beery (tables) Nov. 2 ..... *86
Howell-Oregon Electric Co-op—worry: one word story of a co-op, Dec. 7 .. 21
Interior Dept. and Southwestern rural coops seek power contracts (N) Aug. 31 10
Kentucky Co-op and utilities near accord on transmission dispute (N) Nov. 30 73
Kit shows farm electric layout (N) Aug. 17 ..... *41
Market criteria eased for co-ops purchasing Missouri River Basin power, (N), Dec. 21 7
Mid-Century Conference on Resources parley boycotted by five pro-public power groups (N) Dec. 7 9
Missouri Basin customers must make 20-yr estimates of power needs by Jan. 1 (N) Nov. 16 109
Missouri Case revived as federal co-op power tie-up is appealed (N) Nov. 16 110
Missouri-Oklahoma Co-op meeting (N) Oct. 19 108
Montana Power Co. offers coupons to rural customers toward purchase of appliances. D. J. McGonigle, July 13 ..... *180
Monthly and total yearly operating costs of equipment (table) Sept. 14 38
National Rural Electric Cooperative Assn. meeting (N) Sept. 21 ..... *119
National Rural Electric Cooperative Assn.—views on accounting rule (N) Oct. 26 7
NRECA will fight move to boost interest on loans (N) Aug. 3 9
Northern States displays model electric farms, Sept. 21 ..... *194
Northern States Power Co. to supply power to five cooperatives, Otter Tail wheels it (N) Aug. 17 21
Pioneer Rural Electric coop marks site of first REA pole, Aug. 17 ..... *16
Southwest Power Co-op—four-state co-op organized, Nov. 30 ..... *72
TVA helps farmers plan home workshop, Oct. 19 ..... *172
Under-floor brooders give mother-hen warmth, Aug. 10 160
Volunteer Electric Co-op suing TVA (N) Oct. 26 7
Water systems sell appliances (Ed) Aug. 24 100

Rural Electrification Administration

Aluminum contracts made by co-ops with Wisconsin Electric Co[illegible]tive and Reynolds Metals not en[illegible]forced, July 13 220
Budgets for TEA, TVA, Corps of Engineers, and Interior (tables) Aug. 3 6
Estimates 90.8% of U. S. farms electrified (N) Oct. 12 41
New approach to end squabble between Kentucky co-ops and power companies (N) Aug. 17 9
Opposes interest hike (N) Nov. 9 41
Reorganization in electric program (N) Sept. 28 ..... *8
Shakeup in personnel (N) Sept. 7 .... *73
Russia—Soviet power official leaves users in the dark (N) Aug. 17 9

S

Safety

Accidents do happen. W. S. Edsall, Dec. 14 213
American Gas & Electric safety manual. A. M. Perry, Nov. 23 16
Automatic fire system protects waterless station, Nov. 16 ..... *143
Ebasco meeting stresses attitudes towards safety (N) Nov. 9 41
EEI's Transmission and Distribution Committee says attitude plays key role in safety (N) Oct. 19 ..... *106

(Ed) Editorial. * Illustrated. (N) News. (R) Reference Sheet.

Flag warns truck driver of ladder. H. C. Gant, Nov. 30 ... *108
Indiana & Michigan Electric uses models to demonstrate high-line hazards. J. F. Phelan, Dec. 7 ... *32
Line hazards shown at EEI conference (N) Oct. 5 ... *82
Nylon safety straps win out in tests (table) Oct. 12 ... *34
Pacific Gas & Electric driver permit. E. F. Hockenbeamer, Nov. 2 ... *156
System fire protection discussed by EEI (N) Nov. 16 ... 111
Transformer mounted outside of Waltham, Mass. plant to lower fire risk. J. C. Damon, Sept. 21 ... *168

Sales Promotion

"Be modern!—live electrically!" (Ed) Nov. 30 ... 70
Campaign sells light conditioning. H. W. Hobson, July 27 ... *134
Cleveland Electric Illuminating-builder teamwork spurs residential sales, Aug. 24 ... *188
Commonwealth Edison TV show (N) Oct. 12 ... *39
Data sheets sell home town lighting. J. D. Haverkamp, Dec. 14 ... *170
Demonstration trailer from Wheeling Electric sells clothes dryers, Nov. 16 ... *164
Good enough in lighting sales? (Ed) Aug. 10 ... 87
How utilities are selling commercial and industrial lighting (tables) Aug. 10 ... *99-122
Lighting promotion. H. P. Lang, Oct. 26 ... *38
Louisiana Power & Light adds $300,000 annual revenue through lighting campaign. J. E. Fort, Nov. 30 ... *126
Montana Power Co. offers coupons to rural customers toward purchase of appliances. D. J. McGonigle, July 13 ... *180
New Orleans Public Service prods dealers for the maximum market, Sept. 7 ... 136
Product competition vs market development (Ed) Nov. 30 ... 69
Range contest promoted by Sacramento Municipal Utility District, Aug. 17 ... *40
San Diego joins with manufacturers and builders in light conditioned, adequately, adequately-wired home. A. J. McCutcheon, Aug. 31 ... *38
Selling appliances on the point system, Aug. 10 ... *156
Selling dominated industry in 1953, Dec. 28 ... 78
Selling the relighting market (picture feature) Aug. 10 ... *162
Southeastern Electric Exchange sales conference urges utilities to accelerate selling (N) Dec. 7 ... *15
Trailer sells commercial cooking, Oct. 5 ... *136
Washington Water Power launches first sales drive in decade, Nov. 16 ... *162

Salvage
Wire stripper pays for itself in first few days. Jack Shepard, Aug. 10 ... *134

San Diego Gas & Electric—how to duct-splice insulated lead-covered cable. J. B. Bowen (chart) Nov. 16 ... *124
Pepping up home sales through co-operation. A. J. McCutcheon, Aug. 31 ... *38
Puts itself up for trial by ballot, Oct. 26 ... *16

Seattle City Light—BPA administrator appointed superintendent, (N), Dec. 21 ... 9
Hauls equipment to Skagit River powerhouse (N) Aug. 31 ... *34
Dr. Paul J. Raver, PBA administrator may be superintendent (N) Dec. 7 ... 8
Relay boards with sectionalized panels at substation, July 13 ... *142

Securities & Exchange Commission
New members of the Commission (N) July 13 ... 109
Rule U-50 governing competitive bidding of securities to be changed (N) Dec. 7 ... 48
Study to reshuffle utilities shelved by new administration (N) Oct. 5 ... 106

Smoke Abatement

Electric precipitation system recovers dust at International Nickel Co., July 27 ... 132
Philadelphia Electric pays fine for smoke violation (N) July 20 ... 24

Southeastern Electric Exchange
Pinehurst meeting told outlook for utilities is good (N) Oct. 12 ... *9
Sales conference urges utilities to accelerate selling (N) Dec. 7 ... *15

Southern California Edison Co.—El Segundo, Calif. plant to be built (N) Oct. 12 ... 21
Light decontaminates parts. Richard Hatfield, Nov. 30 ... *130

Portable bench cuts test set-up time. W. A. Erskine, Aug. 10 ... *128
Transformer test bench. Redding & Kimball, July 13 ... *146

Southern Nevada Power Co. rejects energy contract with Colorado River Commission (N) Oct. 19 ... 230

Southwest Power Cooperative organization formed, Nov. 30 ... *72

Southwestern Power Administration
Federal power slows in Southwest, Dec. 28 ... 83
Up rates, low water (table) Nov. 23 ... 6

Southwestern Public Service Co.—Economic generation discussed with power companies and engineering firms (N) Oct. 19 ... 224
Frequency-shift telemetering key to multi-station dispatching. Dupree & Burnham, Oct. 5 ... *89

Standardization—Distribution transformer standards issued by EEI-NEMA Committee, July 27 ... 99
EEI and AEIC meeting discusses standardization of meters (N) Nov. 2 ... *76

Statistics

American Public Power Assn.—compares operating statistics of publicly and privately owned electric utilities (tables) Aug. 3 ... 35
Annual kwhr use in 21 cities 1941 and 1951 (tables) Sept. 21 ... 125
Business trend is down (table) Sept. 21 ... 132
Capital expenditures to peak in 1954 (table) Sept. 21 ... 144
Cost survey of steam stations. A. E. Knowlton, July 13 ... *121-136
Electricity consumption in European countries 1951 (tables) Aug. 17 ... 29
Heat and fuel requirements for thermal-electric generation in 1960 (charts) (R) July 13 ... *150
Houston Lighting & Power Co.—rise in power (charts) July 6 ... *22
Large light and power sales up (charts) Sept. 21 ... *142
Market outlook for electric utility common stocks. T. W. Locke (charts) Sept. 21 ... *150
Miscellaneous power sales, Sept. 21 ... *141
Monthly and total yearly operating costs of equipment (table) Sept. 14 ... 38
New electric generating facilities to be installed 1953-56 (table) Sept. 21 ... 128
New era in electrical industry growth (chart & table) Sept. 21 ... 134
1953 Yearend round-up and forecast for 1954, Dec. 28 ... *73
Residential electric bills in 21 cities 1943 and 1953 (table) Sept. 21 ... 125
Residential use leads (charts) Sept. 21 ... *136
Small light and power sales (charts) Sept. 21 ... *140
Summary of accelerated amortization dispositions for electric industry (table) Oct. 26 ... 44
UN collects world data on power per worker (tables) Oct. 5 ... 104
United Nations reports on power construction in Europe (tables) July 27 ... 106
Utility earnings will be maintained in the next recession. C. P. Guercken (charts) Sept. 21 ... *145

Steam Stations and Developments

Airfari for nine journalists to controversial private-public power hot spots, Dec. 21 ... *15
American Gas & Electric puts new plant on line (N) Aug. 24 ... *104
Arkansas Co-op to shift plant site to Oklahoma to sidestep Supreme Court ruling (N) Sept. 28 ... 9
Asbestos board cut with overhung saw. W. B. Sullivan, Dec. 14 ... *160
Automation—push button power plants (Ed) Oct. 19 ... 104
Belle Isle station generators equipped with relays to remove them when excitation is lost. G. E. Taylor, Oct. 5 ... *96
Calculator replaces daily load schedule. C. H. Conrad, Aug. 10 ... *127
California Electric Power Co.'s Highgrove plant opened (N) Nov 16 ... *110
Colombia approves plan for 14 thermal stations (N) Sept. 14 ... 23
Consolidated Edison's Astoria plant solves insulation problems with silicone. J. G. Noest, Nov. 16 ... *112
Consolidated Edison's Astoria station features. Knecht & Noest, July 27 ... *92
Costs
8th steam station cost survey. E. W. Knowlton (charts & tables) July 13 ... *121-136
Cyclone furnaces cut power cost, simplify ash handling. S. T. MacKenzie (charts) Dec. 14 ... *130
Detroit Edison's new St. Clair plant has several innovations. Wagner & Brown, Aug. 3 ... *32
Electric Energy, Inc. changes contractor on its Joppa plant on the Ohio River (N) Aug. 10 ... *90

Elrama power station expansion requires Duquesne Light Co. to change system. J. S. Brown, Dec. 14 ... *123
Finland's power system (map) Nov. 9 ... *32
Get that shore site now (Ed) Aug. 24. 100
Greece's new Aliveri steam station on line (N) July 20 ... *29
Hartford Electric Light's Middletown Steam plant built from model (N) Nov. 2 ... *78
Hartford Electric Light's new Middletown plant rising (N) July 13 ... *108
Higher efficiency provides a challenge (Ed) Oct. 5 ... 76
Houston Lighting & Power Co.—rise in power (charts) July 6 ... *22
Idaho Power Co. to lease Utah Power & Light unit (N) July 27 ... *80
Long Island Lighting's headquarters built to expand with operating ideas. A. J. Pansini, Dec. 14 ... *134
Mississippi Power & Light Delta plant to have cooling pond. R. W. Braswell (tables) Nov. 30 ... *84
More water is needed (Ed) Nov. 30 ... 70
New steam frontiers achieved in '53, Dec. 28 ... 74
Pacific Gas & Electric's Pittsburg steam plant boiler lifted up (N) Aug. 24 ... *106
Public Service Co. of Indiana's Wabash River plant to go on line soon (N) July 13 ... *109
Public Service of New Hampshire Schiller Station new unit (N) Nov. 16 ... *109
Puget Sound Power & Light orders study on proposed plant (N) Aug. 24 ... 106
Southwestern Public Service dispatching center finds frequency-shift telemetering effective. Dupree & Burnham, Oct. 5 ... *89
Stamford, Conn. granted right to condemn utility's land (N) Aug. 10 ... 206
Steam header top sections in su evaporator replaced with elbows. Wm. Cowan, Aug. 24 ... *178
Study heat cycle arrangement for low-cost generation. D. E. Hart, (charts & tables), Dec. 28 ... 96
Tacoma City Light to add unit at steam station (N) July 13 ... 238
TVA claims better A-plant record (N) Sept. 7 ... *70
TVA's Shawnee steam plant progresses (N) July 27 ... *83
Union Electric's Meramec plant dedicated (N) July 20 ... *30
Utah Power & Light starts Castle Gate station (N) Aug. 17 ... 29
Justin Whiting plant dedicated (N) July 13 ... *110

Steel—Soil and galvanizing affect steel corrosion, Sept. 7 ... *104

Storms

Carolina Power & Light damages by Hurricane "Barbara" (N) Aug. 24 ... 107
Catenary speeds service restorations, July 27 ... *132
Commission orders storm plans (Ed) Aug. 10 ... 88
Connecticut PUC decides that placing all overhead power lines underground would be too expensive (N) Aug. 3 ... 19
Tower damage provides key to Worcester tornado data. C. A. Booker (map) Aug. 17 ... *22

Substations

Air ejector primes circulating water pump. H. A. Dilberger, Sept. 7 ... *103
British Columbia opens showcase substation (N) July 6 ... *7
Duquesne Light's new design substation blends into landscape. E. M. Gue, Sept. 28 ... *32
Factors determining the potential rise in station ground mats. M. J. Lantz (charts & tables) Dec. 14 ... *127
Intermountain Rural Electric Assn. opens new substation (N) Aug. 17 ... *21
Levittown, Pa. has aluminum distribution and unit substations. C. E. Nelson, Oct. 5 ... *84
Mobile substations used for eleven years by Pacific Gas & Electric Co. R. F. Stuart, Oct. 19 ... *150
Pennsylvania Electric new dispatching center. C. H. Conrad, Dec. 28 ... *94
Portable substation insures service continuity, Nov. 16 ... *154
"Powerhouse on wheels"—portable substation from Westinghouse Electric (N) Nov. 23 ... 44
Relay boards with sectionalized panels at Seattle substation, July 13 ... *142
Relief model simplifies substation grading and location. M. C. Galiyano, Sept. 7 ... *103
Seattle City Light substation remodeled (N) Aug 10 ... *94
Substation blunger, which is portable, used by kaolin company, July 27. *122
Today's plan for economy in distribution. Campbell & Reilly (charts & tables) Oct. 19 ... *120

Switches and Switching

Anacom solves system transients. C. L. Wagner, Nov. 16 ... *127

(Ed) Editorial. * Illustrated. (N) News. (R) Reference Sheet.

Canyon Ferry Dam plant has switchyard on top (N) Nov. 16 ..... *107
Device detects current in disconnect switch. Dilberger & Meldrin, Aug. 10 ..... *142
Operating charts simplify switch sequence data. Older & Michaes, Dec. 14 ..... *150
Panel painting facilitates by sprayed plastic masking. Glen Herbst, Nov. 2 ..... *110
Switch accurately controls short circuit testing. D. D. McStack, Oct. 5 ..... *118

T

Tacoma City Light's building queried (N) Aug. 3 44
Director voted raise in salary (N) Oct. 5 83
Utility board appointed (N) Aug. 3 .. 30
Tampa Electric Co. to build plant at Black Point (N) Oct. 5 101

Taxes

Colorado utilities ordered to have higher valuations (N) July 20 44
EEI president criticizes tax policies which favor public groups (N) Oct. 5, 78; (N) Oct. 26 ..... *43
Hanford Works case to go to Supreme Court (N) Nov. 16 109
Pennsylvania puts tax on appliances, July 27 136
Private utilities getting federal subsidies charges TVA (N) Oct. 12 8
Telemetering is key to multi-station dispatching, Southwestern Public Service. Dupree & Burnham, Oct. 5 .... *89

Television

Cincinnati-Covington area television sets (N) Sept. 14 38
Color publicity lowers sale of black and white sets (N) Dec. 7 ..... *43
Commonwealth Edison TV show (N) Oct. 12 ..... *39
Special receiver locates TV interference sources. F. L. Greene, Oct. 5 ..*111
Teller-Vision used in New York Savings Bank (N) Nov. 30 ..... *75
Would pay to see TV, Aug. 10 160

Testing and Tests

Aging tests compare transformer oil performance. Schofield & Carver (chart & tables) Nov. 30 ..... *81
Anacom from Westinghouse solves system transients. C. L. Wagner, Nov. 16 ..... *127
BPA's new tower is put to the test, Sept. 21 ..... *118
Commonwealth Edison finds growing electronic applications bring new plant maintenance problems. H. L. Garton, Oct. 19 ..... *111
Copper contacts can be operated above standard temperature limits. Adler & Wadleigh, July 27 ..... *96
Dc instrument tests recloser insulation. R. W. Bethke, Dec. 14 ..... *164
Factors determining the potential rise in station ground mats. M. J. Lantz (charts & tables) Dec. 14 ..... *127
Fault locator at California-Oregon Power finds one breakdown, pays for itself. W. H. Fisher, Nov. 30 .... *101
High Voltage Institute of Germany tests insulator (N) Dec. 7 ..... *8
Instrument transformer test bench. Redding & Kimball, July 13 ..... *146
Lead clamp on pole saves 95% test time, Oct. 5 ..... *112
New bench speeds instrument transformer testing. J. T. Lang, Aug. 24 ..... *166
Nylon safety straps win out in tests (table) Oct. 12 ..... *34
Oscillograph tests high-speed air-blast breakers. Frank Kunze, Nov. 2 .... *107
Portable instrument checks breaker performance. Frank Kunze, Sept. 21 ..... *168
Portable set tests overcurrent relays. E. J. Emmerling, July 27 ..... *100
Radar test set used for fault location in the field. Whysong, Garton & Bracken, Nov. 16 ..... *118
Switch accurately controls short circuit testing. D. D. McStack, Oct. 5 .*118
Transformer test bench is portable. W. A. Erskine, Aug. 10 ..... *128
Toledo Edison starts high-tension power line (N) Oct. 5 101
Trademarks—Reddy Kilowatt and Willie Wirehand to meet in federal court fight (N) July 27 104
Trailers—Safety cradle added to a pole trailer. J. M. Dalton, Dec. 28 ..... *108

Training

Arizona supervisors train themselves. Keith Turley, July 20 ..... *22
Central Hudson Gas & Electric training course, Nov. 23 ..... *43
Developing a good system dispatcher. Jess Paschall, Sept. 14 39
General Electric Co. offers Science Fellowship Program at Case Institute of Technology, Aug. 31 ..... *16
Indiana & Michigan Electric conducting classes on how to handle hot lines, Sept. 14 ..... *16
Outline of lighting sales training program, Aug. 10 107
Teaching utility drivers to be safe. E. F. Hockenbeamer, July 20 ..... *16
Utility executives take course on management sponsored by Southeastern Electric Exchange (N) July 27 ..... *84

Transformers

Aging tests compare transformer oil performance. Schofield & Carver (charts & tables) Nov. 30 ..... *81
Allis-Chalmers' 600-000-v transformer (N) Sept. 14 ..... *43
Automatic fire system protects waterless station, Nov. 16 ..... *143
Contact thermometer attaches easily, Sept. 21 ..... *179
Dallas Power & Light's method of estimating transformer loads, Nov. 16 ..... *116
Delta Station transformers installed in 51 hours, (N), Dec. 21 ..... *32
Drying oven cuts maintenance costs. O. E. Fawcett, July 13 ..... *142
Instrument transformer test bench. Redding & Kimball, July 13 ..... *146
Mobile transformer units reduce outages 75% in New Orleans. E. F. Mayo, Aug. 24 ..... *154
Mobile unit cuts long outages. P. S. Pugh (table) Dec. 7 ..... *34
Molded transformers aid airport lighting, Dec. 28 ..... *116
Mounting transformers outside of Waltham, Mass. plant to lower fire risk. J. C. Damon, Sept. 21 ..... *168
Portable bench cuts test set-up time. W. A. Erskine, Aug. 10 ..... *128
Progressive oil purification saves clay and cuts costs. A. M. McCabe, Aug. 24 ..... *158
Puget Sound Power & Light's new transformer repair and maintenance shop, July 6 ..... *32
Reconnected transformers reverse power at Boston Edison, Benjamin Albert, (charts), Dec. 28 105
Remember voltage requirements (Ed) Aug. 10 88
Sealed subway transformers adopted by Los Angeles Water & Power. J. R. Kelley, Oct. 19 ..... *139
Standard ratings for transformers, single-phase, distribution, overhead type-table (R) Nov. 2 112
Standard ratings for transformers three-phase, distribution, overhead type (R) Nov. 16 148
Standards for distribution transformers issued by EEI-NEMA Committee, July 27 99
Subway transformer inspected by California engineers (N) Oct. 5 .... *83
Testing instrument transformer speeded by new bench. J. T. Lang, Aug. 24 ..... *166

Transmission

Air patrols prove economical and effective. E. A. Schultz, July 27 ...*112
American Institute of Electrical Engineers meeting (N) Sept. 14 ..... *6
BPA's new tower is put to the test, Sept. 21 ..... *118
Catenary speeds service restoration after tornado, July 27 ..... *122
Characteristics of typical modern transmission lines in the U. S. (tables) Aug. 24 126
Connecticut PUC decides that placing all overhead lines underground would be too expensive (N) Aug. 3 19
Corona loss curves for 69-kv and 115-kv lines. M. H. Cohn (R) Sept. 21 ..... *166
Corona loss curves for 138-kv and 161-kv lines. M. H. Cohn (R) Oct. 5 ..... *116
Corona loss curves for 230 kv lines. M. J. Cohn (R) Oct. 19 ..... *146
Current transmission practice (Ed) Aug. 24 99
Design economies in high voltage transmission lines. Murray & Useery (charts) Aug. 24 ..... *113
EHV dominates 1953 transmission, Dec. 28 75
Fault locator at California Oregon Power finds one breakdown, pays for itself. W. H. Fisher, Nov. 30. .*101
For that extra line capacity should it be reconductoring or bundling? P. S. Colby (tables) July 27 101
In modern transmission design-probabilities set insulation levels. C. F. Wagner, Aug. 24 ..... *117
Indiana & Michigan Electric conducting classes on how to handle hot lines, Sept. 14 ..... *16
Indiana & Michigan Electric educates public by using models to demonstrate high-line hazards. J. F. Phelan, Dec. 7 ..... *32
Line structure—concrete piece of work. E. E. Presley, Nov. 30 .... *148
Long Island Lighting system centers its operations in new underground control room. Davidson & Gummersall, Nov. 30 ..... *78
Monkey on transmission line (N) Nov. 9 ..... *34
Montana Power plans tie line with Thompson Falls plants (N) Sept. 14. 21
New computer to figure transmission economies (N) Aug. 17 29
115-kv conductor repaired in 14 min. W. L. Rush, Dec. 14 ..... *156
Pennsylvania Electric consolidates communication in new dispatching center. C H. Conrad, Dec. 28 ..... *94
Radar test set used for fault location in the field. Whysong, Garton & Bracken, Nov. 16 ..... *118
Right-of-way brush control with basal spraying. Coulter & Barrons, Nov. 16 ..... *122
Rocket gun aids conductor stringing, Nov. 2 131
"Sectionalizing" tool speeds work on hot lines. Hanson & Gearhart, Dec. 14 ..... *149
Structure configurations assume 48 forms (diagrams) Aug. 24 ..... *150
Survey of utilities and lines shows how modern transmission designs adapt engineering advances, Aug. 24 ..... *121
Sweden completes longest underwater cable in world (N) Nov. 23 24
Tacoma City Light's transmission tower footings conquer swamp, Oct. 5 ..... *94
Tool aids hanging oil reclosers. E. L. Nelson, Sept. 7 ..... *118
Trees to make everybody happy (Ed) July 13 106
Washington State Operating Agency No. 1 formed (N) Nov. 23 24
Washington Water Power saves pole height by sloping crossarms. G. R. George, Nov. 16 ..... *144
West German problem: transmission and taxes, Aug. 31 ..... *22
Worcester tornado data deduced by tower damage. C. A. Booker (map) Aug. 17 ..... *22

Trucks

Container eliminates blanket damage. P. N. Woodson, Dec. 28 ..... *118
Lamp changers supported on truck by sections of rain spouting. P. N. Woodson, Oct. 5 ..... *126
Lift truck speeds lamp maintenance, Aug. 24 ..... *176
Line jeep power winch handles 80-ft poles. Vivian Bushong, Sept. 7 ..... *118
Tripod derrick saves storage space on truck. W. E. McGowan, Oct. 5 .. *124
Wire racks on top of trucks for globe carrying. P. N. Woodson, Oct. 19.. 166
Turbines—gas—Question of patents. M. M. Cloud, Aug. 24 220
Scotland plans peat-burning power plant (N) Aug. 10 205
Turbines—steam—Jet cooling quadruples generator bushing capacity, July 27 ..... *112

U

Ultrasonic generator cleans parts faster, Oct. 5 ..... *138

Underground Construction

Boring machine "lays" pipe, Nov. 30..*125
11-mile pipe cable completes 132-kv loop in New Jersey. Carmichael & Starrs, Sept. 7 ..... *76
Insulated multiple terminals solve space problem in vault. Morris Brenner, Aug. 24 180
Soil and galvanizing affect steel corrosion, Sept. 7 ..... *104
Union Electric Co.—Space heating load rising rapidly (charts & tables) Nov. 2 ..... *92
Union Electric Co. of Missouri—All lighting is overhead in St. Louis machine shop. R. W. Renkel, Nov. 2 ..... *134
United Illuminating Co.—detachable guide reduces rope wear, Nov. 2 ..... *114
United Nations reports on power construction in Europe (tables) July 27... 106

U. S. Bureau of Reclamation

California office reorganized (N) Oct. 12 18
Decentralization program (N) Nov. 9 ..... *21
Places $8 million in reserve for 25 projects (N) Sept. 28 7
U. S. Dept. of the Interior—The new power policy: a second look (Ed) Nov. 16 103
Upper Peninsula Power Co. acquires Cliffs P & L (N) Oct. 12 21
Utah Power &Light completes line to Moab (N) Sept. 21 122
Employee information program, Dec. 7 ..... *22
Mine-mouth generating plant foundation work (N) Sept. 21 ..... *120
Tank heaters warm heavy asphalt. R. M. Pizza, Nov. 16 ..... *166

V

Ventilation—Compressor room ventilating at Superior Dairy, Nov. 30 133

(Ed) Editorial. * Illustrated. (N) News. (R) Reference Sheet.

Voltage Regulation
Anacom from Westinghouse solves system transients. C. L. Wagner, Nov. 16 ....*127
Capacitor frontiers still expanding. Rydbeck & Hendrickson (charts) Sept. 7 ....*86
Georgia Power device for measuring small voltage variations. R. W. Baker (charts) Nov. 30.... 94
PEA's System Planning Committee discusses voltage control (N) Oct. 19 109

W

Washington State Power Comm.—names J. Frank Ward head, (N), Dec. 28 *66
Washington Water Power—Chelan plant condemnation by PUD upheld (N) Dec. 7 18
Launches first sales drive in a decade Nov. 16 ....*162
Plans first sales promotion program in decade (N) Oct. 12.... 39
Takes over Puget Sound Power & Light (N) Oct. 26.... 45
Washington Water Power see also Puget Sound Power & Light

Welding
Aluminum glyptal seals welds. A. F. Pfandenhauer, July 13....*148
Metering the welding load (Ed) Nov. 2 72
Welding must pay its way (Ed) Oct. 19 104
West Penn Power Co.—drying oven for transformers cuts maintenance costs. O. E. Fawcett, July 13....*142
Engine heaters assure truck starting. R. T. Grunenwald, July 27....*132
Western Massachusetts Electric Co.—electric melting makes precision castings. G. C. Jamison, Sept. 7....*131

Wiring
Appliance sales vs inadequate wiring (chart). F. R. Innes, Nov. 9.... 39
Cincinnati Gas & Electric inaugurates pay-as-you-go wiring (N) Nov. 9... *18
Consolidated Edison's adequate wiring program, Nov. 30.... *76
Demonstrator outlines adequate wiring, Aug. 3.... *39
Detroit customers helped with inadequate wiring problems, Sept. 21...*190
Inadequate wiring—a sore spot gets sorer (Ed) Sept. 7.... 67
Needed: wiring leadership. F. E. Wiatt, Dec. 14.... 213
Product competition vs market development (Ed) Nov. 30.... 69
Wrapped wire solderless connections cut installations costs, July 13....*141
You better sell Mom on adequate wiring (Ed) Oct. 19.... 104
Wisconsin Electric Power Co.—cable pulling eye saves money. H. Sorenson, Aug. 10 ....*138
Trimming tool tapers fibre conduit, saves time. E. M. Kueht, Oct. 19..*162
Wisconsin Michigan Power—lift truck speeds lamp maintenance, Aug. 24 ....*176
Wisconsin Utilitier Assn.—Meeting urges atomic energy compete with conventional fuels (N) Nov. 23.... *15

Y

Yugoslavia—to export power (N) Sept. 14 34
"Yugoslavia to Export Power"—correction. P. H. Chase, Nov. 2.... 156

AUTHOR'S INDEX

ALBERT, BENJAMIN: Reconnected transformers reverse power, Dec. 28. 105
Albertson, L.: Air conditioning cuts dampness, Sept. 7....*131
Resistance heating ups tubing output, Sept. 21 ....*184
Alder, H. A. & K. H. Wadleigh: Copper contacts can be operated above standard temperature limits, July 27 .... *96
Ager, R. P. & G. H. Ramandanes: Banked secondary serves residential customers better, July 27.... *90
Anderson, J. W.: Difference on coolers, Sept. 21 227
Anderson, William: Slight miscalculation, Dec. 14 213
Andre, S. J.: Georgia Tech relights drafting classrooms, Oct. 19....*168

BAKER, R. W.: Measuring small voltage variations, Nov. 30.... 94
Baldwin, Oliver V.: Electronic sorting improves coffee quality, Nov. 30....*130
Ballard, Clark T.: Rug cleaning machine increases production over 200%, Aug. 10 ....*148
Barrons, K. C. & L. L. Coulter: Basal spraying extends season for chemical brush control, Nov. 16....*122
Beery, Virgil R.: House heating seems a desirable load for farm lines, Nov. 2 .... *86
Bethke, R. W.: De instrument tests recloser insulation, Dec. 14....*164
Black, Fischer: Electrical industry forecast for 1954-63, Sept. 21....*131
Booker, Clyde A.: Tower damage provides key to Worcester tornado data, Aug. 17 .... *22
Bowen, J. B.: How to duct-splice insulated lead-covered cable, Nov. 16....*124
Bowman, Merle H. & A. L. Gaenicke: Test socket takes five different thermal meters, Nov. 2....*118
Bracken, J. F., J. L. Whysong & H. L. Garton: Shoot line troubles with radar, Nov. 16....*118
Braswell, R. W.: A cooling pond proves cheaper, Nov. 30.... *84
Brenner, Morris: Basic principles to support aluminum and copper buses, July 27 ....*118
Insulated multiple terminals solve space problem, Aug. 24....*180
Brodie, W. H.: Hoist supports aid turbine maintenance, Oct. 5....*122
Brooks, L. A.: Processing grain with push buttons, July 20.... *42
Brown, G. K. & S. J. Trippy: Electrical breaker racker saves time, July 27..*120
Brown, J. Stanley: Elrama demands system changes, Dec. 14.... *123
Brown, W. W. & H. A. Wagner: Several firsts for Detroit mark new St Clair plant, Aug. 3.... *32
Bryan, C. E.: Comments on room coolers, Sept. 7 ....*149
Bullard, W. R.: 13.2 Kv vs. 4.12 Kv, July 27 148
Burnham, Waldo H. & G. W. Dupree: Frequency-shift telemetering key to multi-station dispatching, Oct. 5... *89
Bushong, Vivian: Line jeep power winch handles 80-ft poles, Sept. 7....*118
Reflector lights aid truck safety, July 27 ....*124

CAMPBELL, H. E. & E. H. Reilly Jr.: Today's plan for economy in distribution, Oct. 19....*120
Carmichael, E. T. & T. E. Starrs: An 11-mile pipe cable completes 132-kv loop, Sept. 7.... *76
Carver, F. T. & L. B. Schofield: Aging tests compare transformer oil performance, Nov. 30.... *81
Caven, W. F.: Intertie helps Atlantic City Electric delay new plant, Dec. 14..*138
Chapman, Frank W.: Too much spaghetti? Nov. 16....*194
Chase, P. H.: Confusion in Yugoslavia, Nov. 2 156
Cloud, M. M. Question of patents, Aug. 24 220
Cohn, M. H.: Corona loss curves for 69-kv and 115-kv lines, Sept. 21....*166
Corona loss curves for 138-kv and 161-kv lines, Oct. 5....*116
Corona loss curves for 230 kv lines, Oct. 19 ....*146
Colby, P. S.: Reconductoring or bundling? July 27....*101
Conboy, R. L.: Electric furnaces make better tools, Aug. 24....*182
Electrically heated sidewalk eliminates snow maintenance, Oct. 19...*183
Conrad, C. H.: Calculator replaces daily load schedule, Aug. 10....*127
Penelec consolidates communication in strategic new dispatching center, Dec. 28 .... *94
Coulter, L. L. & K. C. Barrons: Basal spraying extends season for chemical brush control, Nov. 16....*122
Cowan, William: Header sections replaced with elbows, Aug. 24....*178

DALTON, J. M.: Safety cradles added to a pole trailer, Dec. 28....*108
Damon, G. M.: Comments on room coolers, Sept. 7 149
Damon, J. C.: Transformer site design lowers plant fire risk, Sept. 21....*168
Dannettell, H. W. & J. P. Moran: Pepco lays 5 cables across the Potomac in 2 hr. 40 min., Nov. 30.... *89
David, Bruce W.: EMF unit supplies reliable power, Oct. 19....*128
Davidson, J. L. & J. R. Gummersall: System centers its operations in new underground control room, Nov. 30 *78
Davila, Carlos: Santo Tomas: a sacrifice to hydro power, Aug. 17.... *30
Davis, Alfred A.: Jig facilitates servicing automatic line reclosers, Nov. 2....*118
Davis, Clarence A.: "Come, let us reason together"—report to the PIP conference, Nov. 16....*134
Davis, W. L. & A. P. Kemple: Boom extends usefulness of fork-lift truck, Nov. 30 ....*114
Dilberger, H. A.: Air ejector primes circulating water pumps, Sept. 7....*103
Dilberger, H. A. & E. T. Meldrin: Device defects current in disconnect switch, Aug. 10 ....*142
Dodson, E. Rodger: Lighting—air conditioning design coordinated, Nov. 2..*132
Dugdale, T. W.: Simple relay detects excessive vibration in bull wheel, Dec. 14 ....*160
Dupree, George W. & W. H. Burnham: Frequency-shift telemetering key to multi-station dispatching, Oct. 5 .... *89
Dupre, M. P. & I. Matthyssee: Compression solves distribution connections, Sept. 21 ....*159

EASTER, N. A.: Billing costs cut $20,000 a year, Oct. 26.... *32
Edsall, William S.: Accidents do happen, Dec. 14 213
Emmerling, E. J.: Portable set tests OC relays, July 27....*100
Erskine, W. A.: Portable bench cuts test set-up time, Aug. 10....*128
Exum, Joe H.: Savings outweigh difficulties with aluminum distribution, Oct. 12 .... *32

FARMER, G. EVERETT: Microwave—the backbone of TVA's expanded communications, Oct. 19....*124
Fawcett, O. E.: Drying oven cuts maintenance costs, July 13....*142
Finley, S. R.: Amen on heating, Nov. 30.. 148
Fisher, J. C. & R. W. Gillette: Pipe cable can be pulled farther, Oct. 5.... *98
Fisher, W. H.: Fault locator finds one breakdown, pays for itself, Nov. 30 ....*101
Foss, Marshall M.: Heating in Canada, Aug. 24 225
Fort, James E.: Lighting campaign adds $300,000 EAR ,Nov. 30....*126
Friend, W. F.: Controlling the house heating load, Nov. 2.... *88

GAENICKE, A. L. & M. H. BOWMAN: Test socket takes five different thermal meters, Nov. 2....*118
Galiyano, M. C.: Relief model simplifies substation grading and location, Sept. 7 ....*103
Gant, H. C.: Safety flag warns truck driver of ladder position, Nov. 30...*108
Garton, H. L.: New plant maintenance problems, Oct. 19....*111
Garton, H. L., J. F. Bracken & J. L. Whysong: Shoot line troubles with radar, Nov. 16....*118
Gearhart, Lester J. & E. H. Hanson: "Sectionalizing" tool speeds work on hot lines, Dec. 14....*149
George, Glen R.: Save pole height by sloping crossarms, Nov. 16....*144
Gieson, J. H.: Portable radio receivers aid crews, show savings, Dec. 28....*120
Gillette, R. W. & J. C. Fisher: Pipe cable can be pulled farther, Oct. 5.... *98
Gnuse, H. H. Jr.: Small hydro sites can be developed economically, Sept. 7 *80
Goodner, Ivan E.: Over-sized puller aids fuse replacement, July 13....*156
Greene, F. L.: Special receiver locates TV interference sources, Oct. 5....*111
Greenfeld, E. W.: Uniformity on connectors, Nov. 2.... 156
Gross, E. D. P.: Emergency installation serves temporary need, Sept. 21....*194
Grunenwald, Robert T.: Engine heaters assure truck starting, July 27....*132
Gue, Edwin M.: New design helps get substation sites, Sept. 28.... *32
Guercken, C. P.: FPC's rate of return policy reversed, Sept. 7.... 97
Florida rate verdict may have wide effect, Sept. 28.... 44
Utility earnings will be maintained in the next recession, Sept. 21....*145
Gummersall, J. R. & J. L. Davidson: System centers its operations in new underground control room, Nov. 30 *78
Gunther, John F. & S. D. Snook: Bank relighting blends into architecture, July 6 .... *38

HALL, A. W.: Card system simplifies maintenance scheduling, Oct. 19....*154
Hammer, F. G.: Author rights himself, Nov. 16 194
Today's problems of serving room coolers, July 27.... *86
Hanson, Floyd H. & L. J. Gearhart: "Sectionalizing" tool speeds work on hot lines, Dec. 14....*149
Harsh, M. C.: Single-ballast street light system costs less, Nov. 30....*114

(Ed) Editorial. * Illustrated. (N) News. (R) Reference Sheet.

Hart, D. E.: Study heat cycle arrangement, Dec. 28 96
Hartz, Frank M.: Thyratron tube locator spots overhead grounds, Sept. 7.... *92
Hatfield, Richard: Light decontaminates parts, increases efficiency, Nov. 30..*130
Haverkamp, John D.: Data sheets sell home town lighting, Dec. 14.....*170
Hendrickson, P. E. & V. A. Rydbeck: Capacitor frontiers still expanding, Sept. 7 ..... *86
Herbst, Glen: Sprayed plastic masking facilitates panel painting, Nov. 2...*110
Hobson, H. W.: Consistent effort sells light conditioning, July 27.....*134
Hockenbeamer, E. F.: No sooner said then done, Nov. 2.....*156
Teaching utility drivers to be safe, July 20 ..... *16
Holcomb, Anson M.: Can lifting magnets be supercharged? Dec. 14.....*180
Hughes, E. T.: Reddy's rhetoric ratified, Sept. 21 .....*227
Hush, F. C.: Meter cutoff simplifies chart removal schedule, Nov. 16.....*144

INNES, FRANK R.: Appliance sales vs inadequate wiring, Nov. 9..... 39
Inwood, D. P.: Overvoltage during line-to-ground fault, Dec. 14.....*152

JAMISON, GRAHAEME C.: Electric melting makes precision castings, Sept. 7 .....*131
Johansen, Harold C.: Conductor tension and guying tables for distribution lines, Nov. 30..... 112
Johnson, Douglas: Build night window lighting with traffic count, July 6... *39
Jones, Philip F. Jr.: Old washing machine cleans meter covers better, Sept. 7 .....*108
Jupe, J. H.: Generator cooled for 114F ambient temperatures, Sept. 21....*162

KAHLER, W. H.: Increase industrial lighting levels, Oct. 19.....*118
Kelley, John R.: Utility adopts permanently sealed subway transformers, Oct. 19.....*139
Kemmelmaier, Andreas: Making concrete poles in Germany, Dec. 28..... *92
Kemple, A. P. & W. L. Davis: Boom extends usefulness of fork-lift truck, Nov. 30.....*114
Kimball, Dorr & F. A. Redding: Test bench provides accuracy and safety, July 13 .....*146
Knecht, H. & J. G. Noest: Consolidated Edison's Astoria station features, July 27 ..... *92
Knowlton, A. E.: 8th steam station cost survey, July 13.....*121
Knox, T. B., J. B. Taylor & E. B. Webb: To cope with house heating load local study is essential, Nov. 2.... *80
Kueht, E. M.: Trimming tool tapers fibre conduit, saves time, Oct. 19.....*162
Kunze, Frank: Oscillograph tests high-speed air-blast breakers, Nov. 2...*107
Portable instrument checks breaker performance, Sept. 21.....*168

LANDIS, JOHN W.: Tables simplify comparison of nuclear power feasibility studies, Nov. 9..... 24
Lang, H. P.: Lighting promotion pays out 10 to 1, Oct..... *38
Lang, J. T.: New bench speeds instrument transformer testing, Aug. 24 .....*166
Langevin, L. J.: Electronic battery charging saves floor space, Sept. 7..... 132
Selective fusing saves breaker replacement, Aug. 24..... 180
Lantz, Martin J.: Factors determining the potential rise in station ground mats, Dec. 14.....*127
Lavelle, R. I.: Fire hazard reduced with electric steam generator, Sept. 7...*132
Linders, John R.: Standardizing relays, Aug. 24 220
Locke, Theron W.: Market outlook for electric utility common stocks, Sept. 21 .....*150
Lunge, G. S.: Single channel controls system load and frequency, Nov. 30 ..... *86

MACGINNIS, F. H.: Geiger counter locates hidden pull box, July 13....*169
MacKenzie, S. T.: New firing method cuts power cost, Dec. 14.....*130
Magyar, E. J.: Mobile cradle handles heavy chain-fall, Oct. 19..... 159
Maloney, Robert J.: Was it worth it, after all? Nov. 2..... 156
Mason, John W.: Container extends paint brush life, Sept. 7.....*110
Matthysse, I. & H. P. Dupre: Compression solves distribution connections, Sept. 21 .....*159
Mayo, E. F.: Mobile transformer units reduce outages 75%, Aug. 24.....*154
McCabe, A. M.: Progressive oil purification saves clay and cuts costs, Aug. 24..*158
McCarthy, Clarence D.: Portable boom aids turbine maintenance, Aug. 24..*166
McCutcheon, Alan J.: Pepping up home sales through cooperation, Aug. 31 *38
McGonigle, D. J.: Montana Power Co. puts a premium on rural sales, July 13..*180
McGowan, William E.: Tripod derrick saves storage space on truck, Oct. 5 .....*124
McStack, D. D.: Switch accurately controls short circuit testing, Oct. 5...*118
Meldrin, E. T. & H. A. Dilberger: Device detects current in disconnect switch, Aug. 10 .....*142
Merz, George K.: Clean moss from flume in 13½ hours, Aug. 24.....*158
Michaels, T. S. & C. T. Older: Operating charts simplify switch sequency data, Dec. 14.....*150
Montgomery, W. J.: Indicator detects gas-filled cable leaks, Oct. 5.....*112
Moran, J. P. & H. W. Dannettell: Pepco lays 5 cables across the Potomac in 2 hr. 40 min., Nov. 30..... *89
Murray, L. B. & C. P. Ussery: Design economies in high voltage transmission lines, Aug. 24.....*113
Myers, Jack: Farm family likes electric heating, Nov. 2..... *83

NELSON, C. E.: New Levittown has aluminum distribution and unit substations, Oct. 5..... *84
Nelson, E. L.: Tool aids hanging oil reclosers, Sept. 7.....*118
Newman, Gene J.: Simple jacks lift 15,000-lb reels, Dec. 28.....*123
Noest, John G.: Silicone helps solve insulation problems, Nov. 16.....*112
Noest, J. G. & H. Knecht: Consolidated Edison's Astoria station features, July 27 ..... *92
Norred, William: Loaded reels lifted safely and easily, Nov. 30.....*108

OETTING, BOB: Switching the dial, Nov. 16 194
Older, C. T. & T. S. Michaels: Operating charts simplify switch sequency data, Dec. 14.....*150

PANSINI, A. J.: Long Island Lighting's headquarters built to expand with operating needs, Dec. 14.....*134
Paschall, Jess: Developing a good system dispatcher, Sept. 14..... 39
Perdue, A. R.: Organizing a voltage change over, Sept. 7..... *83
Perry, Allen M.: An effective safety manual for AG&E system, Nov. 23..... 16
Perry, Irving D.: Control system provides position indication and circuit supervision, Sept. 7.....*108
Pfandenhauer, A. F.: Aluminum glyptal seals welds, July 13.....*148
Phelan, John F.: Demonstrating high-line hazards, Dec. 7..... *32
Pizza, R. M.: Tank heaters warm heavy asphalt, Nov. 16.....*166
Potthoff, R. T. & L. W. Wilson: High efficiency using oil or gas, Oct. 5.... *92
Presley, Evans E.: A concrete piece of work, Nov. 30.....*148
Pugh, P. S.: Mobile unit cuts long outages, Dec. 7..... *34

RAMANDANES, G. H. & R. P. Ager: Banked secondary serves residential customers better, July 27..... *90
Redding, Frank A. & Dorr Kimball: Test bench provides accuracy and safety, July 13 .....*146
Reed, L. B.: All-electric facilities build employee morale, Sept. 21.....*180
Load centers and bus duct provide flexibility, Oct. 19.....*174
Reeves, Frank E.: Graph simplifies calculations for 5-kv circuit impedance, Aug. 24 .....*164
Reilly, E. H. Jr. & H. E. Campbell: Today's plan for economy in distribution, Oct. 19 .....*120
Renkel, Roger W.: All lighting is overhead in St. Louis machine shop, Nov. 2 .....*134
Incandescents brighten Missouri market, Oct. 12..... *41
Rilsness, James H.: Mechanization makes potato chips better and faster, July 27 .....*130
Rippl, H. D.: Quick-connection terminals aid A-base meter testing, Dec. 28....*108
Rotenberry, F. E.: Tips on starting gasoline standby engines, Sept. 21..... 174
Rush, W. L.: 115-kv conductor repaired in 14 min., Dec. 14.....*156
Rydbeck, V. A. & P. E. Hendrickson: Capacitor frontiers still expanding, Sept. 7 ..... *86

SAEZ S. RAUL: Chilean con niption, Nov. 16 194
Schafer, B. W.: Single-phase load split on 3 phases, Nov. 30..... 92
Schofield, L. B. & F. T. Carver: Aging tests compare transformer oil performance, Nov. 30..... *81
Sciotti, Fred: Aerial cable storm-proofs 4-kv distribution system, Oct. 19....*114
Sags for No. 6, 3 and 1/0 aerial cables, 5 kv, Dec. 28..... 112
Scott, R. F.: Comments on room coolers, Sept. 7 .....*149
Shaw, Carroll H.: Overall rate view needed, Dec. 14..... 213
Shear, Verne W.: "Me" and "I", July 27..*148
Shepard, Jack: Wire stripper pays for itself in first few days, Aug. 10.....*134
Shock, Clarence T.: Engineers at Congress, July 27 148
Shultz, E. A.: Air patrols prove economical and effective, July 27.....*112
Snook, Stephen D. & J. F. Gunther: Bank relighting blends into architecture, July 6 ..... *38
Snyder, E. A.: Promote resistance heating also, Dec. 28..... 100
Sorenson, H.: Cable pulling eye saves money, Aug. 10.....*138
Stafford, J. M. Jr.: Putting first things first, Aug. 24..... 220
Stapel, C. L.: Induction heating solders parts automatically, Dec. 14.....*180
Infrared baking aids mass production, Oct. 5 .....*140
Strip heaters provide uniform temperature distribution, Oct. 5.....*138
Starrs, T. E. & E. T. Carmichael: An 11-mile pipe cable completes 132-kv loop, Sept. 7..... *76
Straus, W. Rayner & W. C. Tome: Baltimore lights U. S. 1 and U. S. 40 interchange, Nov. 30.....*104
Stuart, Roy F.: Experience suggests changes in new mobile substations, Oct. 19 .....*150
Sullivan, W. B.: Over-hung saw speeds asbestos board cutting, Dec. 14....*160
Surles, Marguerite: Range sales hot during summer frolic, Nov. 30..... 128
Sykes, J. H. M.: Britain inaugurates 275-kv supergrid, Aug. 31..... *32
British experiment with electric farm aids, Aug. 3..... *38

TAYLOR, GORDON E.: Trip unit when excitation is lost, Oct. 5..... *96
Taylor, John B., T. B. Knox & E. B. Webb: To cope with house heating load, local study is essential, Nov. 2.... *80
Tome, Walter C. & W. R. Straus: Baltimore lights U. S. 1 and U. S. 40 interchange, Nov. 30.....*104
Trippy, S. J. & G. K. Brown: Electrical breaker racker saves time, July 27.*120
Tschirn, E. R.: Planning an entry for an EEI lighting award, Nov. 23..... *29
Turley, Keith: Arizona supervisors train themselves, July 20..... *22
Tynan, J. J.: Utility lights up, Sept. 14... *37
Tyson, E. H.: Meter handling methods save time of five men, Nov. 16.....*152

URDANG, LAURENCE: Says luminous ceiling is no "expensive innovation", Nov. 30 148
Ussery, C. P. & L. B. Murray: Design economies in high voltage transmission lines, Aug. 24.....*113

VAN LUVANEE, CHARLES: Standard test set checks varhour meter phase angles, Sept. 21.....*170

WADLEIGH, K. H. & H. A. ADLER: Copper contacts can be operated above standard temperature limits, July 27 ..... *96
Wagner, C. F.: Probabilities set insulation levels, Aug. 24.....*117
Wagner, Charles L.: Anacom solves system transients, Nov. 16.....*127
Wagner, H. A. & W. W. Brown: Several firsts for Detroit mark new St. Clair plant, Aug. 3..... *32
Watson, C. B.: Tramp-iron protector stops coal belt tears, Aug. 10.....*134
Webb, E. B., J. B. Taylor & T. B. Knox: To cope with house heating load, local study is essential, Nov. 2..... *80
Wenner, E. M.: Infrared paint drying saves floor space, Aug. 10.....*148
White, Raymond H.: Young enthusiasm, Nov. 16 194
Whitney, J. Francis: Utility sets lighting example, Sept. 7..... *90
Whysong, J. L. H. L. Garton & J. F. Bracken: Shoot line troubles with radar, Nov. 16.....*118
Wiatt, Frank E.: Needed: wiring leadership, Dec. 14..... 213
Wilson, L. W. & R. T. Potthoff: High efficiency using oil or gas, Oct. 5 ..... *92
Woodson, P. N.: Container eliminates blanket damage, Dec. 28.....*118
Rain spouting holds lamp changers on truck, Oct. 5 .....*126
Wire racks multiply globe carrying capacity, Oct. 19..... 166

YARGER, M. R.: Stop prevents over registration of demand-printing meter, Oct. 19.....*142
Young, George: Folding hoist speeds oil filter changing, Sept. 21.....*172

(Ed) Editorial. * Illustrated. (N) News. (R) Reference Sheet.